

# BEST PRACTICE

13

MAY 2008

Improving  
Māori Health



**Hei Tohunga Matau**

Like pounamu, health is a taonga – a treasure

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**Cover:** Hei Tohunga Matau – symbolising health, prosperity and wellbeing. Like pounamu, health is a taonga – a treasure to be nurtured, developed and grown.

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## UPFRONT: Diverse realities of Māori

Māori have poorer health outcomes, die younger and have higher rates of chronic disease than other New Zealanders. Reducing health inequalities that affect Māori is a key priority for primary care.

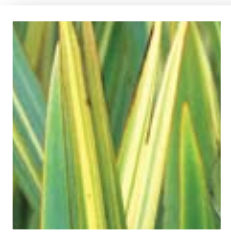
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## Disparities in care

Data shows that Māori have a greater burden of illness, yet receive less healthcare. Training in cultural competency and targeted programmes can help to reduce these inequalities.

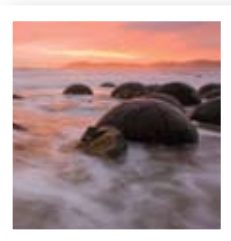
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## Practical solutions for improving Māori health

So what can primary healthcare professionals do about this? We have developed a framework that can be applied to the treatment and management of health conditions. A key component is taking the time to build an effective relationship between clinician and patient.

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## Cardiovascular disease and diabetes in Māori

Cardiovascular disease and type II diabetes are major causes of hospitalisations and mortality in Māori. There are many things that a clinician can do to reduce risks and inequalities, including addressing the increased prevalence of modifiable risk factors in Māori, screening earlier and enrolling patients in targeted management programmes.

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## Asthma and chronic cough in Māori children

Māori children with **asthma** have greater hospital admission rates, present with more severe symptoms and require more days off school. Educating about the level of asthma control that is achievable and creating a practical action plan can help to address these issues.

**Bronchiectasis** is a rare cause of cough, however it may be seen more commonly in some groups of Māori children. Prevention includes improving vaccination coverage, treating chest infections early and educating that chronic cough is not normal.

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## Why we still need to think of rheumatic fever?

Māori living in the upper North Island have one of the highest rates of acute rheumatic fever in the world. This disease can be prevented by addressing risk factors and treating sore throats early in high risk groups. In this article we profile a community intervention that appears to have successfully eradicated rheumatic fever.

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## Update: Gout in the Māori community

Gout is a significant health issue for Māori. This article explores Māori perception of gout and updates evidence from New Zealand and overseas.

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## Demystifying Rongoā Māori: Traditional Māori healing

Rongoā Māori is an important aspect of health care to many Māori, representing diversity of practice and a holistic approach to health. Native plant based remedies are an integral part of treatment along with physical therapies and spiritual healing.

## Essentials

- 38**    **10 minute tutorial**    Creating a cardiovascular risk assessment alert in your PMS.
- 40**    **Snippets**    Varenicline and suicidal behaviour. Wider access to quit cards. The lung age of smokers.
- 44**    **ETC**    Evidence that counts: cough and cold medications, low back pain, glucosamine and warfarin, drug samples, risk-reducing treatments.
- 48**    **Correspondence**    Your feedback; dexamethasone for otitis externa, ECG for lithium users.

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# Diverse realities of Māori

*Ka haea te ata  
Ka hapara te ata  
Ka koroki te manu  
Ka wairori te kutu  
Ko te ata nui kā horaina  
Ka taki te umere o kā tamariki  
Ka awatea*

This karakia comes from Kāi Tahu traditions and is used in relation to new life, to begin something and to clear the way. It refers to babies crying, dawn breaking and birds calling, signaling that day has arrived. It is an appropriate introduction to our first Best Practice Journal dedicated to Māori Health.

The Māori population is as diverse and dynamic as any other population and can be described and defined in a number of ways. The 2006 census told us that:<sup>1</sup>

- 565,329 (15%) of the total population identified themselves as belonging to the Māori ethnic group.
- 643,977 people (18%) of the total population indicated they had Māori ancestry.
- The Māori population is young—53% are aged less than 25 years.
- Māori birth rates are higher than non-Māori and well above replacement level, contributing to a growing Māori population.
- After a widening of the gap in life expectancy between Māori and non-Māori over the 1990s, the gap has stabilised and is currently about 7.6 years (Table 1).

Māori continue to have the poorest health status of any ethnic group in New Zealand. This is not acceptable and reducing health inequalities that affect Māori is a key priority for the government and sector.<sup>2</sup>

Research shows that primary care services have not addressed these ongoing inequalities.<sup>3,4</sup> Māori have received fewer referrals, fewer diagnostic tests and less effective treatment plans from their doctors compared to non-Māori.<sup>5</sup> Primary care services therefore have an excellent opportunity to make a significant contribution to reducing these inequalities.

**Table 1:** Life table for the Māori and non-Māori population in New Zealand, by gender, 2000–2002<sup>1</sup>

Age	Expected years of life remaining		Expected years of life remaining	
	Māori female	Non-Māori female	Māori male	Non-Māori male
0 years	73.2	81.9	69.0	77.2
25 years	49.3	57.7	45.6	53.3
45 years	30.4	38.3	27.3	34.4
65 years	15.1	20.2	12.7	16.9
85 years	5.2	6.5	5.2	5.2

A strong primary health care system is central to improving the health of New Zealanders and to addressing and removing inequalities in health. The vision for primary health care, from Whakatātaka Tuarua—the Māori Health Action Plan 2006–2011, is to ensure Māori participate in easily accessible local primary health care services that improve their health, keep them well, and co-ordinate their ongoing care.<sup>6</sup>

He Korowai Oranga, the Māori Health Strategy, provides a framework for the sector to take responsibility for supporting the health status of whānau rather than just individuals. The overall aim of He Korowai Oranga is whānau ora: Māori families supported to achieve their maximum health and wellbeing.<sup>8</sup>

### He Taru Tawhiti

*A weed from far away. A metaphor for the unfamiliar diseases that arrived with the early settlers.*

Māori have poorer health outcomes, die younger and have higher rates of chronic disease than other New Zealanders. There is a growing body of evidence showing that poorer access to health services for Māori, relative to health need, is one of the contributing factors to the inequalities in outcomes. Improving access to services is vital and will lead to a reduction in the health inequalities between Māori and other New Zealanders.<sup>6</sup>

As Dr Peter Jansen (Ngāti Raukawa, GP and Māori health leader) states **“the healthcare system reflects its origins in a dominant European culture, which values individualism and self-advocacy, and provides care in a manner which advantages certain groups including higher socioeconomic groups, non-Māori, non-Pacific groups and those without disabilities.”**<sup>7</sup>

There are around 240 Māori health providers delivering a range of health and disability services through out New Zealand. These services, often characterised by Māori delivery frameworks, are however not the exclusive domain of Māori. They are available to and accessed by others

### Cultural competence standards

The Health Practitioners Competence Assurance Act 2003 requires registration authorities to set standards of cultural competence, review and maintain the competence of health practitioners and set standards to ensure ongoing competence.

The Medical Council of New Zealand has defined cultural competence as:

“Cultural competence requires an awareness of cultural diversity and the ability to function effectively and respectfully, when working with and treating people of different cultural backgrounds. Cultural competence means a doctor has the attitudes, skills and knowledge needed to achieve this. A culturally competent doctor will acknowledge:

- That New Zealand has a culturally diverse population.
- That a doctor’s culture and belief systems influence his or her interactions with patients and accepts this may impact on the doctor-patient relationship.
- That a positive patient outcome is achieved when a doctor and patient have mutual respect and understanding.”<sup>9</sup>

who also benefit from this method of service delivery.<sup>6</sup>

### Ko te kokomuka te rākau i tunua ai te moa

*Kokomuka is the wood that was used to cook the moa. There is a proper thing for every purpose.*

The development of Māori health providers ensures that Māori have the right to a choice of service provider. Whilst Māori health providers will continue to develop and play a more significant role towards health equity and parity of outcomes, they do not remove the onus from mainstream

providers to deliver services that are equally as effective for Māori. Mainstream providers continue to deliver the majority of services to Māori and play a vital role in ensuring Māori have access to appropriate, timely and effective primary care services.<sup>7</sup>

One of the consistent components of cultural competence is the ability to establish a good rapport and effective communication with every patient and their whānau.

Māori, like all other cultures, are a dynamic and diverse group. Different Iwi, hapū and whānau have different traditions, beliefs and dialects. In addition, since the earliest contact, Māori have intermarried with other cultures and recent statistics show that half of all Māori have partners from another culture. It is important providers do not reinforce, or assume anyone fits into, what might be considered a typical stereotype.<sup>10</sup>

Māori sit on a continuum from those with more traditional lifestyles, beliefs and values through to those with lifestyles, beliefs and values dominated by more contemporary western influences. ACC guidelines state “If a person wears a tā moko this may not mean they want to converse in Te Reo Māori, or conversely that someone wearing a suit and tie has rejected traditional Māori cultural values”.<sup>10</sup> Be guided by the patient and whānau about what cultural, spiritual and other practices are appropriate for them.

## Kei a koe te tikanga

*It is up to you*

It is up to the health professional, as the expert, to learn the preferences of each patient, Māori or non-Māori, and strive to put them at ease in order to create and sustain a respectful, trusting therapeutic relationship.<sup>11</sup>

### Further reading:

**The Royal New Zealand College of General Practitioners**  
RNZCGP cultural competence guidelines

[http://www.rnzcgp.org.nz/quality/cultural\\_competence.php](http://www.rnzcgp.org.nz/quality/cultural_competence.php)

## ACC

Summary guidelines on Māori cultural competencies for providers

<http://www.acc.co.nz> (search site with “He Whakatauki”)

## Medical Council of New Zealand

Best health outcomes for Māori: Practice implications

- Statement on cultural competence
- Statement on best practices when providing care to Māori patients and their whānau

<http://www.mcnz.org.nz> (search site using “maori health outcomes”)

## References

1. Robson B, Harris R. (eds). Hauora: Māori Standards of Health IV. A study of the years 2000-2005. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare; 2007.
2. Ministry of Health. Tatau kahukura: Māori Health Chart Book. Public Health Intelligence Monitoring Report no.5. Wellington: Ministry of Health; 2006
3. Crengle S. The development of Māori primary care services. Pac Health Dialog 2000; 7:48-53.
4. Baxter J. Barriers to health care for Māori with known diabetes. NZ National Working Group on Diabetes and Te Rōpū Rangahau Hauora a Ngāi Tahu; 2002.
5. Gribben B. Ethnicity and resource use in general practice in West Auckland. Experience in Practice. Health care review online 1999;1
6. Ministry of Health. Whakatātaka Tuarua: Māori Health Action Plan 2006-2011. Wellington: Ministry of Health; 2006
7. Jansen P, Smith K. Māori experiences of primary health care: Breaking down the barriers; NZ Fam Prac 2006; 33(5): 298-300
8. Ministry of Health. He Korowai Oranga: Māori Health Strategy. Wellington: Ministry of Health; 2002
9. Medical Council of New Zealand. Statement on cultural competence. Available from <http://www.mcnz.org.nz> Accessed April 2008.
10. ACC. Summary Guidelines on Māori Cultural Competencies for Providers. Available from <http://www.acc.co.nz> Accessed April 2008.
11. Medical Council of New Zealand. Best Health Outcomes for Māori: Practice Implications. Available from <http://www.mcnz.org.nz> Accessed April 2008.



# Disparities in care

## Key Concepts

- Māori require enhanced access to quality primary care services.
- Programmes targeted at the most vulnerable enhance care for all patients.
- Non-targeted programmes may not reduce disparities and can in fact increase them.

Māori require enhanced access to quality primary care services. It is widely known that Māori have a greater burden of illness.<sup>1,2,3,4,5</sup> This is greatest in areas where primary care providers have significant influence such as cardiovascular disease, diabetes, smoking-related lung diseases, cancers and avoidable hospital admissions.

## So how is primary care doing?

### Cardiovascular Disease

Pharmaceutical Warehouse data indicates that in 2007 there were 732 dispensings of statins for every 1000 Māori over the age of 35 years (Table 1). It is unknown if this level is appropriate but it is less than that of Europeans who have a lower prevalence of cardiovascular disease in this age group and Pacific peoples who have a similar prevalence of cardiovascular disease.

**Table 1:** New Zealanders dispensed statins in 2007

Ethnicity	Dispensings per 1000 people aged over 35 years
Pacific peoples	1080
European + other	829
Māori	732
Asian	440

### Diabetes

There were 452 dispensings of metformin for every 1000 Māori over the age of 35 years (Table 2). As expected this is higher than dispensings for Europeans but it is less than that for Pacific peoples.

**Table 2:** New Zealanders dispensed metformin in 2007

Ethnicity	Dispensings per 1000 people aged over 35 years
Pacific peoples	835
Māori	452
European + other	254
Asian	245

Screening and early diagnosis of diabetes is essential for effective management and prevention of complications.

The Get Checked programme ensures that every New Zealander with diabetes can have a free annual check. In an audit of selected DHBs and PHOs by the office of the

.....

### Examples of disparity

A nationally representative study in 2001/2002 of primary care by Crengle et al<sup>7</sup> indicated examples of disparity in care between Māori and non-Māori. However, it is important to note that while the findings are of interest, the authors did identify a number of caveats, including differences in age of participants—nearly half of all Māori visits were for patients under 25 years of age, compared to only 30% of non-Māori visits.

- Māori, although representing 15% of New Zealand’s population, accounted for only 12% of visits to GPs.
- Doctors reported lower levels of rapport with Māori patients.
- The mean length of consultation time for Māori patients was 13.7 minutes, compared to 15.1 minutes for non-Māori.
- Tests and investigations were ordered in 21.0% of Māori visits, compared to 25.4% of non-Māori visits.
- Age-specific rates of ordering blood lipid and glucose tests were lower for Māori in the 35–44, 45–54 and 55–64 age groups.
- Among patients with a diagnosis (either existing or new) of chronic obstructive respiratory disease, 62.6% of Māori received a prescription for a respiratory drug compared to 71.0% of non-Māori.
- Follow-up within three months was recommended for 54.6% of Māori and 57.5% of non-Māori visits.
- Referrals were less common for Māori (14.7%) than for non-Māori (16.2%).

Disparities have also been identified in several other New Zealand studies.<sup>8,9,10,11,12</sup>

.....

auditor general, the coverage rates for Māori continued to fall short of the annual targets set by the DHBs (Table 3). The coverage rates (the percentage of the estimated eligible population participating in the programme) for Pacific peoples were high in 2006, with rates exceeding the DHB targets.<sup>6</sup>

**Table 3:** “Get Checked” coverage targets and actual results for the year ended 31 December 2006

DHB	Māori		Pacific Peoples	
	Target %	Actual %	Target %	Actual %
Auckland	60	31	60	105
Capital & Coast	45	39	80	83
Counties Manukau	63	53	100	125
Hawke’s Bay	45	42	65	74
Otago	41	29	66	98
Tairāwhiti	60	46	90	163

Once in the Get Checked programme, Māori received similar access to the recommended treatment for people with diabetes.

### COPD

Despite the high prevalence of smoking in Māori and the resultant higher incidence of COPD, Māori received less dispensings for tiotropium than Europeans but more than Pacific peoples (Table 4).

**Table 4:** New Zealanders dispensed tiotropium in 2007

Ethnicity	Dispensings per 1000 people
European + other	38
Māori	24
Pacific peoples	9
Asian	3

## Asthma

Although Māori children have more hospital admissions than European children and present with more serious symptoms, the preventer to reliever ratio is significantly lower than for European children (Table 5).

**Table 5:** New Zealand children aged under 12 years dispensed asthma preventers and relievers in 2007

Ethnicity	Preventer to reliever ratio
European	0.7
Asian	0.7
Māori	0.4
Pacific peoples	0.4

## What actually reduces inequalities?

**Programmes targeted at the most vulnerable enhance care for all patients.** Lieu et al reported on a programme aimed at improving care for children with asthma from low income families.<sup>13</sup> They found that better care was delivered by practices with high cultural competence scores (a composite measure that included policies for access and equity as well as cultural competence training for clinicians) combined with clinical audit and feedback to clinicians. “Better care” was defined both by ratings from parents and reviews of the medical records and prescription data. This positive impact was felt by all children with asthma including those from minority groups.

**Non-targeted programmes may not reduce disparities and can increase them.** In an ACC pilot programme, increasing subsidies for GP and radiology visits was found to result in only a small increase in access by Māori and people on low-incomes, and similar increases in access by all other patients.<sup>14</sup> Therefore the relative disparity in access remained.

These studies point to a need for a comprehensive approach to cultural competence and targeted services,

if Māori are to achieve equitable access and use of primary care services. With support, practices can begin to eliminate inequalities in care.

## References

1. Ajwani S, Blakely T, Robson B et al. Decades of Disparity: Ethnic mortality trends in New Zealand 1980-1999. Wellington: Ministry of Health and University of Otago. July 2003
2. Ministry of Health. Reducing inequalities in health. Ministry of Health, 2002. Available from: <http://www.moh.govt.nz>
3. Sporle A, Pearce N, Davis P. Social class mortality differences in Māori and non-Māori men aged 15-64 during the last two decades. N Z Med J 2002 March; 115 (1150)
4. Skegg D, McCredie M. Comparison of cancer mortality and incidence in New Zealand and Australia N Z Med J 2002 May; 115 (1153).
5. ACC (Te Kaporeihana Awhina Hunga Whara). Summary Guidelines on Māori Cultural Competencies for Providers. 2004. Wellington, ACC. (See also Accident Compensation Corporation: Māori 2nd Quarterly Report 2003/2004)
6. Office of the Auditor General. Ministry of Health and district health boards: Effectiveness of the “Get Checked” diabetes programme. Available from <http://www.oag.govt.nz/2007/diabetes> Accessed April 2008.
7. Crengle S, Lay-Yee R, Davis P, Pearson J. 2005. A Comparison of Māori and Non-Māori Patient Visits to Doctors: The National Primary Medical Care Survey (NatMedCa): 2001/02. Report 6. Wellington: Ministry of Health
8. Arroll B, Goodyear-Smith F, Lloyd T. Depression in patients in an Auckland general practice. N Z Med J 2002;115(1152): 176-9.
9. Gribben B. Ethnicity and resource use in general practice in West Auckland. Experience in Practice. Health care review online 1999;1
10. Norris, P, Which Sorts of Pharmacies Provide More Patient Counselling? J Health Serv Res Policy 2002; 7(3) supp 1:23-28
11. Johnstone K, Read J. Psychiatrists' recommendations for improving bicultural training and Māori mental health services: a New Zealand survey. Aus N Z J Psychiatry 2000;34:135-45
12. McCreanor, T, Nairn, R. Taiuiwi general practitioners talk about Māori health: interpretative repertoires. N Z Med J 2002;115(1167)
13. Lieu et al, Cultural Competence Policies and Other Predictors of Asthma Care Quality. Pediatrics 2004;.114 (1): e102-e110
14. ACC News. Issue 98 February 2007. Available from [www.acc.co.nz](http://www.acc.co.nz)

# Practical solutions for improving Māori health

## Nā tō rourou, nā tāku rourou, ka ora ai te iwi

*With your food basket and my food basket, the people will be well*

**1**

### **Plan to improve Māori health**

Change does not happen by accident, it needs a plan. Develop a simple practice plan for addressing disparities. Ask your PHO for a copy of their Māori health strategy.

**2**

### **Set realistic practice goals**

You don't have to change everything at once. Set priorities. The first goal may be as simple as correctly recording ethnicity or smoking status.

**3**

### **Build trusting therapeutic relationships**

Invest time in building trusting therapeutic relationships with patients and whānau.

**4**

### **Engage patients in their health issues**

Consider each contact as an opportunity to educate and engage patients in their health care and address wider issues.

**5**

### **Agree on realistic patient-centred health goals**

Break up the health issue into manageable pieces. Agree on achievable treatment goals, activity goals and lifestyle changes.

**6**

### **Make it easy for patients to come back**

Give patients a reason and expectation about returning. Use reminders. Make the environment welcoming. Offer solutions for financial barriers.

**7**

### **Form partnerships**

Find out who is taking responsibility for a patient's healthcare – it may be another whānau member. Involve Māori health providers. Encourage community initiatives.

## Plan to improve Māori health

A simple practice plan sets out the broad direction for what you want to achieve and sets the basis for developing practice goals.

A practice plan to identify and address inequities in primary health care for Māori can be developed from PHO Māori health strategies. Practices should contact their PHO managers to facilitate the development of their own practice plan.

## Set realistic goals for your practice

You do not have to change everything at once. The first step may be to implement workforce development so all members of the team know the importance of the changes to be made.

Simple initial goals may include:

- Correctly recording ethnicity (see BPJ 9)
- Recording smoking status
- Flagging patients for a BP check next time they attend
- Comparing immunisation rates between Māori and non-Māori

Practice software can be used to simplify the achievement of these goals.

## Build trusting therapeutic relationships

Māori place great emphasis on establishing a trusting relationship with their healthcare providers. Patient satisfaction and acceptability of treatment reflect the ability of providers to show they understand their patients and are understood by them. As Professor Mason Durie

notes, a culturally appropriate approach by the provider is an important element, in determining both the “willingness of people to access services and the success of any treatment or care then delivered.”<sup>1</sup>

Primary care providers may lack knowledge of Māori culture. This can result in misunderstandings, incorrect assumptions and inherent biases, each of which can lead to needs not being met.

Māori willingness to see a health provider is impacted by previous poor experiences. One study which collected the opinions of Māori and Pacific stakeholders identified examples of barriers to care including:<sup>2</sup>

- Fears (embarrassment, wasting GP time, causing offence or receiving offence)
- Humility (to act in a “lowly position of honour”, desire not to voice disagreement)
- Mistrust (historically, prevailing health care systems have not met the needs of Māori; low expectations for the service; anticipation that misunderstanding will result)

Clearly, if Māori are to achieve equitable access to care and equitable outcomes, health care providers must improve their relationship with Māori.

## Take time for introductions

Māori rely heavily on interpersonal connections and these are the basis on which an effective therapeutic relationship can be established. Any link is useful, for example through people, places or activities in common. Investing time in a brief chat will pay off in the long term by establishing an effective ongoing relationship with the patient and whānau.

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1. Durie, M. Mauri Ora. The dynamics of Māori health, Oxford University Press, Auckland, 2001

2. Buetow S, Adair V, Coster G, et al. Reasons for poor understanding of when and how to access GP care for childhood asthma in Auckland, N Z Fam Prac 2002, April 19(4):319 -25

### Let the patient tell their story

Dr Paratene Ngata, a Māori GP from Tolaga Bay says: “It is important to first develop the relationship with your patient. You do this with effective communication. This is not your ability to tell the story from a clinical or scientific perspective, but to listen to the story from your patient, and reflect that back to them in the correct context in which they are able to fully participate in their own treatment. The development of the relationship with the patient and possibly their whānau will support a positive outcome from your intervention”.

This view is consistent with that of Dr Rawiri Tipene-Leach, a Māori GP from Hawkes Bay. He stressed the importance of ensuring the storytelling was from the patients perspective, not his own. “As a clinician your skill is to reflect that anecdotal evidence and incorporate both views into a management plan—your view which incorporates the clinical and scientific perspective and that of your patient, which may have a particular cultural slant.”

### Understand the unique illness experience for individual patients


The key to patient-centred medicine is to see the health issue through the eyes of the patient. One way to gain an understanding of the illness experience is to use the FIFE format as a framework for open questions. This gives a chance to explore the Feelings, Ideas, effects on Function and Expectations of the patient. The aim is to gain an understanding of the unique nature of the illness experience for each patient. The focus is on illness rather than disease and how it is affecting this particular patient. This approach then helps guide your management of the illness on an individual basis.


### Use open questions to check understanding and agreement

When communicating with Māori, health professionals need to ensure that the message being communicated is the same message that is being received. Many Māori have a natural desire to seek a consensus and to avoid

disagreements about small matters. They may defer to the authority of those in the practice team who are, after all experts in health care, but that does not necessarily mean they agree with what you are saying. The values of harmony and respect may be more important than expressing disagreement.

Unfortunately, this desire for consensus in no way means that once the patient is out of your presence they will proceed with the treatment plan, so it is important not to interpret “yes” or silence as agreement.

 **Best practice tip:** Using open questions is a good approach to check a patients understanding. For example, you could say, “to make sure we’ve covered everything, can you tell me what you understand about...”.

 **Best practice tip:** Consider printing out the consultation notes for your patient to take away with them.

### Some Māori may prefer to communicate in their own language

Dr Rawiri Tipene-Leach says that many of his elderly Māori patients prefer to communicate fully in Māori language (Te Reo Māori) as this allows them to tell their story in their own context. This leads to very trusting, effective relationships where patients are more likely to report health outcomes. However, as most GPs are unlikely to be conversant in Te Reo Māori, this may be difficult to implement. The use of translation services can be an option where available.

Written patient information in Te Reo Māori can be useful, however it is important not to assume that all individuals are literate in Te Reo Māori. Anecdotal evidence shows that the most popular resources contain partial translation of common recognisable terms.

### Engaging patients in their health issues

One of the barriers to health care for Māori, in fact for many people, is getting them to make an appointment with their doctor in the first place. Once there, it cannot

be assumed that the patient will return regularly, so it is important to regard each encounter as an opportunity to engage people in their own health care and address wider issues.

Practices or individual GPs can develop their own processes for addressing health issues, regardless of the reason for the patient encounter. Some examples may be:

- CVD risk assessment for patients presenting with gout
- Smoking cessation advice for patients presenting with “winter ills”
- Blood pressure check when attending for asthma inhaler repeat

Often time constraints will prevent GPs from addressing multiple issues within one appointment. Simply flagging a patient for later review is a step in the right direction.

## Agree on realistic patient health goals

A good way to approach a health issue is to break it up into manageable pieces and deal with one thing at a time. Often patients will resist change and it is difficult to implement several changes at once.

Realistic goals are pertinent to the patient, achievable and measurable.

### Set patient centred goals

Clinical goals are not always relevant to the patient. It may be more meaningful to a person with asthma, to set a goal of completing a netball game without breathlessness, than focusing on improving peak expiratory flow rate.

The framework, Te Whare Tapa Wha, describes the four cornerstones of Māori health; spiritual, psychological, physical and family. This is maybe be useful framework on which to establish patient centred goals (see BPJ 11).

**“As a clinician your skill is to reflect that anecdotal evidence and incorporate both views into a management plan — your view which incorporates the clinical and scientific perspective and that of your patient, which may have a particular cultural slant.”**

### Set goals that are achievable

Goals should be achievable and built upon as the patient makes treatment gains. For example, an activity goal for a person with heart failure may at first be to walk to the letterbox without being out of breath. This activity goal can be increased once treatment has begun to have an impact on the illness.

### Set goals that are measurable

You can only know when a goal has been achieved when it is measurable. For example reaching target uric acid levels in gout, finishing a netball game without breathlessness, reducing rescue inhaler use to three times a week.

## Make it easy for patients to come back

### Give patients a reason

Use patient centred goals to give patients a reason to come back to measure progress and set new goals. Validate the reason for their attendance. Make a follow up appointment at the time if possible, otherwise put them on the recall list.

### Use reminders

Depending on what you have agreed upon with your patient previously, phone, text, email or write to remind them of appointments or recall them for follow up. Create an expectation that they will attend.

### Make the environment welcoming

It may seem unimportant but how at ease patients feel in your waiting room may determine how likely they are to come back.

### Consider barriers to access

Financial barriers may be an issue for some patients. Consider how your practice could offer solutions to this barrier, for example setting up regular small payments or accessing targeted funding. Practical barriers may also include transport, getting time off work and child care. Possible solutions could be the use of volunteer drivers or courtesy vans, flexible clinic times and child friendly facilities.

### Form partnerships

#### Whānau often have an important role in healthcare

Know what part whānau play in the healthcare of your patient. The person taking responsibility is not always the patient, or in the case of a child, it is not always their parent. The role of the patient may be to receive treatment, while the role of whānau may be to support the patient and communicate with the doctor. Welcome whānau participation in consultations and involve them in treatment decisions and goals. Whānau may be helpful in assisting you to ensure that information has been understood by both you and your patient and an agreed plan is in place.

#### Māori health providers

Māori providers range from sole practitioners for example some Rongoā providers, to large organisations for example Māori PHOs, Ngāti Porou Hauora.

There are around 240 Māori health providers delivering a range of health and disability services throughout



New Zealand. These services include Tamariki Ora (Well child checks), Whānau Ora (supporting at risk whānau), disease state management (assisting people with chronic conditions such as diabetes and respiratory disease) and Aukati Kai Paipa (smoking cessation).

Primary care clinicians can use Māori health providers to complement the services they already provide and to ensure a more holistic approach. This may especially be of benefit for patients in rural areas or where access (financial, cultural or transport) is an issue.

If you are unsure who the Māori providers in your area are, then details can be found at:

[www.maorihealth.govt.nz](http://www.maorihealth.govt.nz)

or through your DHB.

#### Encourage and support community initiatives

Consider investing time in the wider community in which you practice. In a Māori community time spent attending marae and community events will strengthen relationships.

Many practices have established initiatives with local community groups, schools or businesses, for example “Ngāti and Healthy” (see page18).

**Remember: It's not too hard. Any step you take is better than doing nothing at all.**



# Cardiovascular disease and diabetes in Māori

Cardiovascular disease and type II diabetes are major health issues for Māori because:

- They are major causes of mortality and hospitalisations, affecting individuals, whānau and community.
- Inequalities in rates and outcomes between Māori and non-Māori persist and in some cases appear to be increasing.

Risks can be reduced and these conditions respond well to being managed with appropriate care.

## What can health professionals do?

### Set realistic practice goals

**Start screening programmes ten years earlier in Māori**  
Māori develop diabetes and cardiovascular disease earlier than non-Māori. Screening programmes should be started earlier to identify and diagnose disease and reduce the development of more serious disease. Ideally, cardiovascular risk assessment should be started ten years earlier in Māori (35 years for Māori men and 45 years for Māori women). A recent study in patients receiving cardiovascular risk assessment showed that Māori were receiving a risk assessment three years earlier than non-Māori but the average age of first assessment was 53 years.<sup>1</sup>



## Ko te pipi te tuatahi, ko te kaunuku te tuarua.

*A small wedge is used first followed by a larger one\**

Although a full cardiovascular risk assessment is ideal, a partial cardiovascular risk assessment may be better than none at all. For a patient who does not attend general practice regularly, an achievable goal might be to record blood pressure and take a random blood glucose. Note details about smoking status, family history, blood pressure, height, weight and abdominal circumference. There is evidence that the recording of these details in primary care is incomplete.<sup>2</sup>

Decision support and practice management programmes may be helpful in reducing barriers to care by providing alerts to identify patients eligible for screening and tools to assess risk.<sup>1</sup> See page 38 for details on how to set up patient alerts for screening.

### The following organisations have Māori resources available on their websites:



- National Heart Foundation [www.nhf.org.nz](http://www.nhf.org.nz)
- Te Hotu Manawa Māori [www.tehotumanawa.org.nz](http://www.tehotumanawa.org.nz)
- Diabetes NZ Ltd [www.diabetes.org.nz](http://www.diabetes.org.nz)
- PHARMAC [www.pharmac.govt.nz](http://www.pharmac.govt.nz)
- The Quit Group [www.quit.org.nz](http://www.quit.org.nz)
- Aukati Kai Papa [www.auahikore.org.nz](http://www.auahikore.org.nz)
- Ministry of Health [www.moh.govt.nz](http://www.moh.govt.nz)
- SPARC Ihi Aotearoa [www.sparc.org.nz](http://www.sparc.org.nz)
- New Zealand Guidelines Group [www.nzgg.org.nz](http://www.nzgg.org.nz)

\* *Whakataukī (Proverb)*—In reference to tree felling: an initial small effort may lead to a significant return.

## Build a trusting therapeutic relationship

Effective communication, establishing links and building a rapport with the patient and whānau is critical. Provide information that aligns with Māori beliefs, values and understandings. Many organisations in New Zealand provide specific Māori resources.

## Engage patients in their health issues

### Have a high index of suspicion for early symptoms of disease

Take every opportunity to enquire about symptoms such as exertional chest pain or breathlessness. If necessary, refer patients for exercise testing to help with early diagnosis of cardiovascular disease. Early symptoms of diabetes might include polyuria, thirst or fatigue.

Ask if any whānau have heart disease, diabetes or have had a stroke and how it has affected their lives. Discuss how there are many things that can be done to prevent and treat these conditions.

Opportunistic testing can help engage Māori in healthy lifestyle programmes:

- **Take any opportunity to measure glucose.** Although a fasting glucose is the best option, a random blood glucose over 11 mmol/L suggests diabetes and below 5.5mmol/L is likely to be normal. Discussion of results between these levels can lead the way to further investigation.
- **Give patients a form for a fasting lipid test,** discuss when and where they can get it done and make a follow up appointment for them to discuss the results or arrange for them to be phoned with the results. Create an expectation that the test will be done.
- **Consider cardiovascular risk in all people who present with gout** as there is increasing recognition that asymptomatic hyperuricaemia is an independent risk factor for development of cardiovascular disease (see BPJ 8).

## Agree on realistic patient-centred health goals

**Promote prevention and early management of diabetes and cardiovascular disease** by setting achievable and measurable goals.

Smoking, high blood pressure and obesity are important targets for modification of cardiovascular risk, prevention of type II diabetes and reduction in complications.

### High blood pressure

In one New Zealand study, the age standardised prevalence of self reported high blood pressure was 23.7% in Māori males compared to 17.6% in European males and 23.9% in Māori females compared to 19.2% in European females. Another study found that Māori also have higher rates of undiagnosed high blood pressure than European New Zealanders.<sup>3</sup>

### Smoking cessation

Smoking is the leading modifiable risk factor causing disease. In New Zealand 40% of Māori males compared to 21% of European males are smokers. One half (50%) of Māori females are smokers, compared with around one fifth (20%) of European females.<sup>4</sup>

Smoking is a significant contributor to ethnic and socio-economic health inequalities. All Māori who smoke should be encouraged and supported to stop. Māori are equally as motivated and just as likely as non-Māori to have made a quit attempt in the past year. Māori can be encouraged to quit smoking using nicotine replacement therapy (NRT) and programmes such as Aukati Kai Paipa, a smoking cessation support programme delivered by Māori for Māori, that takes a whānau based approach to smoking cessation. The programme reports that quit rates are significantly better for Aukati Kai Paipa than conventional programmes.<sup>5</sup>

A first step to engaging Māori in reducing or stopping smoking may be to encourage a smoke-free house and car.

## Don't miss "golden opportunities"

**One Heart Many Lives** is a social marketing programme aimed at those at high risk of cardiovascular disease, such as Māori and Pacific men over 35 years. The key messages are:

- Get your heart checked
- Get more active
- Eat better
- Stop smoking

The programme has been rolled out in Hawke's Bay and Northland and recently launched in the Lakes DHB region.

As a result more Māori and Pacific peoples should be presenting for cardiac risk assessment, including a number who may not have otherwise come in to see a doctor or nurse. Ensure that you maximise this opportunity as it is a positive experience for all involved.

[www.oneheartmany lives.co.nz](http://www.oneheartmany lives.co.nz)



### Healthy diet

The age standardised prevalence of obesity (BMI  $\geq 30$ kg/m<sup>2</sup> in non-Māori and  $\geq 32$ kg/m<sup>2</sup> in Māori) is higher in Māori than European New Zealanders. In 2002, 26.5% of Māori males were obese compared to 16.9% of European males. 26.1% of Māori females were obese compared to 19.1% of European females.<sup>3</sup>

## “Ngāti and Healthy Prevent Diabetes Project”

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“Ngāti and Healthy” is a community-based diabetes prevention programme set up in 2004 in the rural Māori community of Te Tairāwhiti where approximately half of the adults in the Ngāti Porou community have a glucose metabolism disorder. The programme’s main aim is to reduce the prevalence of insulin resistance in the short term and therefore reduce type II diabetes and associated complications in the long term.

The population based intervention has three key messages:

1. Increase consumption of fruit and vegetables
2. Increase consumption of wholegrain foods
3. Increase exercise levels

Education to encourage behavioural change is directed at all community levels such as health promotion (e.g. radio advertisements, posters featuring local personalities); structural changes (e.g. working with schools and employers to encourage healthy food choices, retailer promotion of healthy options); community based education programmes (e.g. exercise classes, weigh-ins and menu swaps).

A diet rich in fruit and vegetables and low in fat is beneficial for preventing and managing cardiovascular disease and diabetes. Diabetes services, including the provision of dietary advice, specifically developed for Māori are ideal to encourage Māori to implement and benefit from them.<sup>6</sup>

An initial goal may be to agree on a number of days that healthy food is consumed.

### Physical activity or “Green Prescriptions”

General advice to increase physical activity is often given by primary care providers. One study showed that Māori and Pacific peoples received more physical activity advice and Green Prescriptions than other New Zealanders although numbers were very small—the same study showed that only 13% of all people reported receiving advice about physical activity and 3% reported receiving a Green Prescription.<sup>7</sup>

An initial goal may be a small but agreed and measurable increase in exercise, for example to walk to school, work or shops at least three times per week.

### Form partnerships

#### Enrol Māori patients in management programmes and refer to Māori providers where suitable and/or available

Where possible, enrol Māori patients in disease-specific and/or Māori-based disease management programmes. A sound knowledge of Māori services available within your region and referral processes is essential to ensure patients and whānau are fully informed.

The **Get Checked** programme provides a free annual check-up for people with diabetes focusing on physical health, lifestyle, and disease management.

Māori enrolment in the Get Checked programme in 2006 was lower than non-Māori.<sup>3</sup> However, there is encouraging evidence that once Māori are involved in these programmes, they receive similar access to recommended care. For example, Māori in the Get Checked programme were prescribed statins at equivalent levels to others in



the programme. Māori also received similar access to the recommended tests including blood tests, retinal screening, and blood pressure measurement.<sup>3</sup> Strategies to increase access to these services, by ensuring Māori patients are enrolled and actively followed up, will help to reduce inequalities.

### Improve coordination with secondary care

There are a number of reasons why Māori do not make it to secondary care appointments, ranging from simple administration issues such as recall or appointment letters sent to a wrong address to more complex issues such as cultural barriers.

Primary care services may need to co-ordinate secondary care appointments on behalf of their patients and work with hospitals to ensure timing for their patient is suitable, transport is organised, and whānau or other support are available.

There is some evidence that having specialist clinics in a practice – a diabetes specialist or cardiologist visiting once a month for patient follow up – can be used to reduce

non-attendance to specialist appointments and improve patient outcomes.<sup>8</sup>

Although in recent years coronary revascularisation rates for Māori have increased, there are still disparities with less Māori referred for these procedures even though they have a higher burden of cardiovascular disease.<sup>3</sup>

Increasing access to exercise testing and diagnostic tests may also be needed.<sup>9</sup>

### It is not too hard!

There are many opportunities in primary care to improve the health of Māori and reduce disparities at an individual and whānau level. The first step is to get involved and get your patients involved. Use every opportunity to engage Māori in health care, promote prevention, screen earlier and recognise early symptoms of chronic disease. Enrolling Māori in management programmes and referring them where appropriate to Māori providers and secondary care will help to reduce disparities.

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### References:

1. Riddell T, Jackson R, Wells S, et al. Assessing Māori/non-Māori differences in cardiovascular disease risk and risk management in routine primary care practice using web-based clinical decision support: (PREDICT CVD-2). *N Z Med J* 2007; 120(1250). Available from: <http://www.nzma.org.nz/journal/120-1250/2445/>
2. Rafter N, Wells S, Stewart A et al. Gaps in primary care documentation of cardiovascular risk factors. *N Z Med J* 2008; 121(1269):24-33
3. Robson B, Harris R. (eds). *Hauora: Māori Standards of Health IV. A study of the years 2000-2005*. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare 2007.
4. Bramley D, Riddell T, Crengle S, et al. A call to action on Māori cardiovascular health. *N Z Med J* 2004; 117(1197). Available from: <http://www.nzma.org.nz/journal/117-1197/957/>
5. Aukati Kai Paipa history. Available from: [http://www.tehotumanawa.org.nz/documents/File/AKP\\_history.pdf](http://www.tehotumanawa.org.nz/documents/File/AKP_history.pdf) (accessed April 2008)
6. New Zealand Guidelines Group (NZGG). *Management of type 2 diabetes*. Wellington: New Zealand Guidelines Group. 2003.
7. Croteau K, Schofield G, Mclean G. Physical activity advice in the primary care setting: results from a population study in New Zealand. *Aust N Z J Public Health* 2006; 30(3): 262-267.
8. Gruen RL, Weeramanthri TS, Knight SE, Bailie RS. Specialist outreach clinics in primary care and rural hospital settings. *Cochrane Database Syst Rev* 2003; 4.
9. Penney L, McCreanor T, Moewaka Barnes H. 2006. *New perspectives of heart disease in Te Tai Tokerau: Māori and health practitioners talk. Final report*. Te Rōpū Whariki, Massey University, Auckland.

# Asthma and chronic cough in Māori children

Cough in children is a common presentation in general practice. Upper respiratory tract infections, asthma, smoke exposure and chest infections are frequent causes of cough. Bronchiectasis is a less frequent cause of cough but may be seen more often in population groups such as Māori and Pacific children.

Asthma and bronchiectasis are examples of respiratory conditions where chronic cough or other symptoms can be unnecessarily tolerated. This results in more severe disease and poorer health outcomes.

## Asthma in Māori children

Despite a similar prevalence of asthma among all children in New Zealand, Māori children with asthma:<sup>1</sup>

- Have hospital admission rates that are almost two times that of non-Māori
- Have more severe asthma when presenting to health care providers
- Require more days off school due to asthma symptoms

## How can health professionals contribute to better outcomes for Māori children with asthma?

### Set realistic practice goals

One study found that Māori, were less likely to have a regular general practitioner, or access to regular preventer medication or a peak flow meter or have an asthma action plan than non-Māori.<sup>2</sup>

Realistic practice goals may be:

- Ensure all children with asthma have access to appropriate medication
- Ensure all children with asthma have an asthma management plan
- Record household smoking status for all children with asthma
- Identify the family member who usually supervises the child's asthma inhaler use

### Build a trusting therapeutic relationship with Māori children and their whānau


Tu Kotahi Māori Asthma Trust provides some key points to consider when working with Māori children and their whānau:

- Find out what whānau already know about asthma and their expectations regarding your role

- Discuss how the child fits within the whānau. Are there other family members with asthma? Sharing of medication and spacers is a common occurrence in the community
- Ask about housing conditions; Is the house smoke free? Is the family living in damp housing conditions?

### Engage patients in their health issues

A consultation may present an opportunity to ask how asthma is affecting the patient’s life and to enquire about other family members with asthma. Often healthcare advice provided to one family member may be utilised by siblings, parents and grandparents to improve health outcomes for the whānau.

 **Best practice tip:** Ask patients with asthma attending a consultation if they have their “rescue” inhaler with them. This can generate a conversation about how often they use the “rescue” inhaler, how often they use their “preventer” and therefore their degree of asthma control.

### Agree on realistic patient-centred health goals

**Ensure a realistic expectation of control.** One of the reasons for the high morbidity of asthma in New Zealand is that many people tolerate symptoms of poor control. One study reported that among those who reported symptoms of poor control, almost all (86%) were satisfied with their

### Tu Kotahi Māori Asthma Society as an example of an asthma programme specifically for Māori

Tu Kotahi was established due to a need to reduce the barriers for Māori in receiving quality asthma care.

As well as providing education in homes or in other settings where families feel comfortable, the service enables other social and health issues that may be impacting on a child’s asthma to be addressed.

Tu Kotahi suggests that housing, heating, budgeting, transport and the cost of prescriptions are some of the complex factors that should be factored into an overall asthma management plan.

degree of control, indicating an inappropriate acceptance of their symptoms and/or unrealistic criteria for control.<sup>2</sup>

**Educate** Māori children with asthma and their whānau about what level of asthma control is normal and how to achieve this. Education that focuses on health benefits and takes into account the patient and their whānau’s health beliefs, goals and expectations may be useful. Table 1 shows an example based on te whare tapa wha framework. Other Māori health frameworks could also

**Table 1:** Managing asthma using te whare tapa wha framework

Wairua (Spiritual)	Hinengaro (Psychological)	Tinana (Physical)	Whānau (Family)
Improved asthma management allows the child to feel a sense of well-being.	Improved asthma management gives confidence to the child and whānau for managing future attacks and relieves anxiety.	Improved asthma management increases the ability of the child to participate in physical activities, i.e. playing with other children.	Improved asthma management results in less distress for the family and can also result in more participation in family activities.

be applied. However it is important to set realistic and measurable patient-centred goals. For example sleeping without waking with cough.

Specific Māori resources have been developed and can be found on the Asthma and Respiratory Foundation of New Zealand website: [http://www.asthmanz.co.nz/for\\_maori.php](http://www.asthmanz.co.nz/for_maori.php)

### **Make action plans**

Make sure every child with asthma has an action plan. Encourage both the child and their whānau to be involved with the action plan. Action plans may help with understanding symptoms and improve recognition of early signs of an exacerbation. They may also enable increased understanding of the purpose of any medication. Action plans that are symptom based and linked to improved

Tu Kotahi recommends the following when providing an asthma management plan:

- Consider a simple pictorial management plan including pictures of inhalers and spacers. This simplifies the instructions for giving medications and can be followed by any family member involved in the care of the child.
- Personalise the plan, including the child's name. This can be provided to all caregivers, and the school.
- Demonstrate how to use the medication with a spacer and provide simple information that reinforces both technique and maintenance of the medication and spacer.
- Consider using a doll or teddy bear as a teaching aide when demonstrating how to use a spacer to younger children and their whānau. Spacers are less likely to be used if the learning experience is traumatic.

health may be more useful than those based on PEF readings.

### **Encourage a smoke free environment**

Exposure to smoke increases the severity of pre-existing asthma and lower respiratory tract disease in children.

The benefits of a smoke free environment should be explained. Parents and whānau who smoke need encouragement and support to give it up, with their child's health as a potential motivator. A minimal goal is smoke free house and car.

### **Make it easy for patients and whānau to come back**

Involve the child and their whānau in the ongoing process of improving their asthma. Give them a reason to come back, for example suggest a star chart which records how often each inhaler is used and how many times the child is short of breath or wheezy. If appropriate the child can take responsibility for completing this chart. Encourage whānau to bring back the chart and discuss it together.

In patients who are struggling with control of their asthma, consider making follow up appointments for them when medications are due to be renewed, rather than allowing phone prescriptions. However there may be cost implications or other barriers to this.

### **Form partnerships**

Consider referral to Māori providers or other services where available and appropriate.

Referral to specialist asthma services, including asthma educators, paediatricians and organisations such as the Asthma Society of New Zealand may be appropriate in some cases.

Reduced asthma morbidity and improved access to health services has been seen in some rural, community-led asthma self-management programmes where Māori have been actively involved.<sup>3</sup>





## Bronchiectasis in Māori children

Vaccination programmes and improved living conditions have resulted in a decrease in the incidence of bronchiectasis in most developed countries but not New Zealand.<sup>1</sup>

In New Zealand 80% of children with bronchiectasis are of Māori or Pacific ethnicity. Higher prevalence has been reported in other indigenous populations including Alaskan natives and Aboriginal children. The estimated prevalence of bronchiectasis in New Zealand children is 1 in 3000 overall but three times higher in Māori children and 12 times higher in Pacific children.<sup>1</sup>

### Low socioeconomic status may be a risk factor

40% of New Zealand children affected by bronchiectasis live in the most deprived areas in New Zealand.<sup>4</sup> It is likely that socioeconomic status is linked to bronchiectasis in complex ways, including immunisation rates and access to health care. Improvements in socioeconomic status, housing and education are likely to improve the health of Māori children with respiratory disease.<sup>1</sup>

**A delay in access to care and/or delayed treatment of chest infections** can increase the risk of developing bronchiectasis. Chest infections at a young age or infections that are severe or recurrent contribute to the incidence of bronchiectasis. High rates of socioeconomic deprivation can result in reduced or delayed access to antibiotics for acute chest infection.<sup>6</sup>

Pneumonia, tuberculosis, and whooping cough are also risk factors for bronchiectasis. In 50% of cases the cause of bronchiectasis is unknown but often assumed to be secondary to lower respiratory tract infections. 20–25% of cases follow severe pneumonia.<sup>1,4</sup>

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Bronchiectasis is defined as irreversible widening of the airways (bronchi) in the lung. It is characterised by inflammation, destruction of bronchial walls, and chronic bacterial infection. Clinically, the condition manifests as chronic cough and chronic overproduction of sputum, which is often purulent.<sup>5</sup> Bronchiectasis is often the result of either severe or recurrent respiratory tract infection such as pneumonia, tuberculosis, or whooping cough.<sup>1</sup>

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## What can health professionals do to prevent bronchiectasis in Māori children?

### Set realistic practice goals

#### Improve vaccination coverage

Low vaccination rates in Māori may be a significant contributor to the higher incidence of bronchiectasis. Overall New Zealand has a low immunisation rate compared to other developed nations. The rates of immunisation for Māori and Pacific children are even lower. Only 42% of Māori are fully immunised by two years of age. A low rate of immunisation in New Zealand has resulted in higher rates of diseases such as whooping cough.<sup>1</sup>

Studies have shown that vaccination rates are increased by the use of telephone, face to face or letter reminders.<sup>7</sup> Numerous reminders may be required and for Māori, face to face reminders may be best.

**Practice goals for improving vaccination coverage could include:**

- Automatically generated vaccination recalls for children, which can be actively followed up
- Annual audits to assess practice coverage levels
- Improved education for parents about vaccination

### **Early treatment of chest infections**

Timely use of antibiotics for infants and children with acute chest infections is important to decrease the incidence of bronchiectasis. Pharmhouse data shows that Māori are dispensed considerably less antibacterials compared to non-Māori. Target antibiotic treatment for respiratory infections to children who are at risk.

### **Early diagnosis of bronchiectasis**

Persistent productive cough in children that has lasted for more than six to eight weeks requires further investigation. Although bronchiectasis is rare, this diagnosis should be considered in high risk children.

### **Engage patients in their healthcare**

**Prevention is the most important way to reduce morbidity and mortality of bronchiectasis.** Infant vaccination and the timely treatment of acute chest infection is crucial in preventing bronchiectasis.

Educating whānau plays a key role in prevention.

- **“Chronic cough is not normal”.** A daily cough for greater than four weeks is not usually normal and may be a sign of chest disease. Children need to be seen by a health provider earlier rather than later.
- Reinforce messages about **smoking cessation** or **smoke free environments**.

### **Make it easy for patients to come back**

A positive experience with health care can increase the likelihood of parents bringing their child back. Although treatment may not always be necessary for every cough, validate the reason for the visit and encourage reattendance.

### **Form partnerships**

To improve immunisation rates referral to immunisation coordination services could be beneficial. Outreach services may be available in some areas.

### **References:**

1. Trying to Catch Our Breath. The burden of preventable breathing diseases in children and young people. The Asthma and Respiratory Foundation of New Zealand, 2006.
2. The Burden of Asthma in New Zealand. The Asthma and Respiratory Foundation of New Zealand, 2002.
3. Ellison-Loschmann, King R, Pearce N et al. Regional variations in asthma hospitalisation among Māori and non-Māori. *N Z Med J* 2004;117(1188):U745.
4. Edwards EA, Asher MI, Byrnes CA. Paediatric bronchiectasis in the twenty-first century: Experience of a tertiary children's hospital in New Zealand *J Paediatr Child Health* 2003;39(2):111-7.
5. ten Hacken N, Kerstjens H, Postma D. Bronchiectasis. *BMJ Clin Evid* 2008;01:1507.
6. Robson B, Harris R. (eds). *Hauora: Māori Standards of Health IV. A study of the years 2000-2005.* Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare, 2007.
7. Jacobson Vann JC, Szilagyi P. Patient reminder and patient recall systems for improving immunisation rates. *Cochrane Database Syst Rev* 2002; 4.

# Why we still need to think of RHEUMATIC FEVER

Māori in New Zealand, particularly those living in the upper North Island, have one of the highest rates of acute rheumatic fever and rheumatic heart disease in the world.<sup>1</sup> For those of us who live and practise in other parts of the country, rheumatic fever is a disease found only in textbooks or in older people with valvular heart disease, resulting from acute rheumatic fever some 50 to 60 years ago. Both acute rheumatic fever and rheumatic heart disease are largely preventable diseases.

In 2006, there were 103 cases of acute rheumatic fever in New Zealand, with a population rate of 2.5 per 100,000.<sup>2</sup> Māori accounted for 62% of these cases and 89% were under the age of 20 years.

The main factors contributing to these high rates are outlined in the recently developed New Zealand guidelines and include:<sup>1</sup>

- Overcrowded living conditions
- Socioeconomic deprivation
- An increased incidence of pharyngitis with group A streptococcus
- Decreased access to appropriate and effective healthcare

## What is acute rheumatic fever?

Acute rheumatic fever arises from an auto-immune response to group A Streptococcus infection, usually from the upper respiratory tract. There is, on average, a latent period of three weeks between the initial infection and the development of acute rheumatic fever.

Acute rheumatic fever consists of an acute widespread inflammatory response that affects the heart, joints, skin and brain. The heart (specifically the mitral and/or aortic valves) is the only organ that suffers long term damage. Premature death is the ultimate consequence of rheumatic heart disease.

There is clear evidence that people on low incomes are more at risk especially if living in overcrowded environments. Māori are more likely to be over represented in this demographic.

In addition to higher rates of acute rheumatic fever and rheumatic heart disease, Māori also have higher rates of recurrence, and with every recurrent episode the risk

of permanent heart damage is increased. There is no evidence of a genetic susceptibility of Māori to rheumatic fever.<sup>3</sup>

It is important for GPs to maintain a high degree of suspicion of acute rheumatic fever within high risk groups. Children of European or Asian ethnicity and children living in the South Island rarely contract the illness.

There is currently no vaccine for group A streptococcus in New Zealand. Vaccines are being developed but, as there are many serotypes of streptococcus, they are not universal.

**The main task of the GP is to suspect the condition and then refer to secondary care for confirmation of the diagnosis and treatment.**

For more details on diagnosing and treating rheumatic fever, refer to the “New Zealand Guidelines for Rheumatic Fever”, available from:

<http://www.nhf.org.nz/files/Rheumatic%20fever%20guideline%201.pdf>

## What can health professionals dealing with high risk groups do to prevent acute rheumatic fever?

### Set realistic practice goals

Be aware of the level of risk within your practice community. Acute rheumatic fever is a notifiable disease. Information can be found in annual surveillance reports or by contacting the local Medical Officer of Health. Monthly surveillance reports on notifiable diseases can be accessed online at: [http://www.surv.esr.cri.nz/surveillance/monthly\\_surveillance.php](http://www.surv.esr.cri.nz/surveillance/monthly_surveillance.php).

Ensure practice staff are aware of the New Zealand guidelines for rheumatic fever and the management of sore throat.

Ensure the practice has a targeted approach to sore throat management. This means considering antibiotics for sore throat in people aged three to 45 years in high risk groups.<sup>4</sup> Rheumatic fever is unlikely to be seen in children under three years because their immune systems are not fully developed.

### Engage patients in their health issues

The key factor in primary prevention of rheumatic fever is the need to treat streptococcal throat infections in children who are at high risk. Educate whānau about the possible consequences of untreated throat infections: “Sore throats matter”.

An algorithm has been developed for the management of sore throat caused by group A streptococcus.<sup>4</sup> This algorithm includes information on managing sore throats within households and is available from: <http://www.nhf.org.nz/files/Guide%20for%20Sore%20Throat%20Management.pdf>

If there are three or more episodes of group A streptococcal pharyngitis within a household within a three month period, then all members of the household should have throat swabs and be treated with antibiotics (if positive for group A streptococcus). It is acceptable to wait for up to nine days for throat culture results as it is unlikely that rheumatic fever will occur within this time.

### Agree on realistic patient health goals

- If group A streptococcal pharyngitis is suspected or identified, then patients need to complete a ten day course of antibiotics (usually penicillin V). Ask the patient or their caregiver how they are going to achieve this.
- To reduce the spread of infection children who have group A streptococcal pharyngitis should not attend day care or school until treatment has been established for 24 hours. Ask the caregiver how they are going to manage this.

## HOW A COMMUNITY CONTROLLED THE STREPTOCOCCUS<sup>5</sup>

A community based primary prevention programme for rheumatic fever was initiated in Whangaroa, Northland in 2002. Pre-intervention rates of acute rheumatic fever for children aged five to 14 years were 424 per 100,000; one of the highest reported rates worldwide for school aged children. Risk factors identified were untreated group A streptococcal pharyngitis, overcrowding, poor access to medical care, geographical and seasonal differences.

The approach taken was:

- Taking swabs three times a week from school children with sore throats on an ongoing basis. This was to reach a “quality standard” so that there was no more than nine days between sore throat and treatment.

- Referral of those with a positive culture to a medical centre.

- Prescription of amoxicillin for ten days.

N.B. Penicillin V is usually the recommended treatment, however amoxicillin was chosen for ease of use.

- An education programme regarding sore throats (and the connection with acute rheumatic fever)

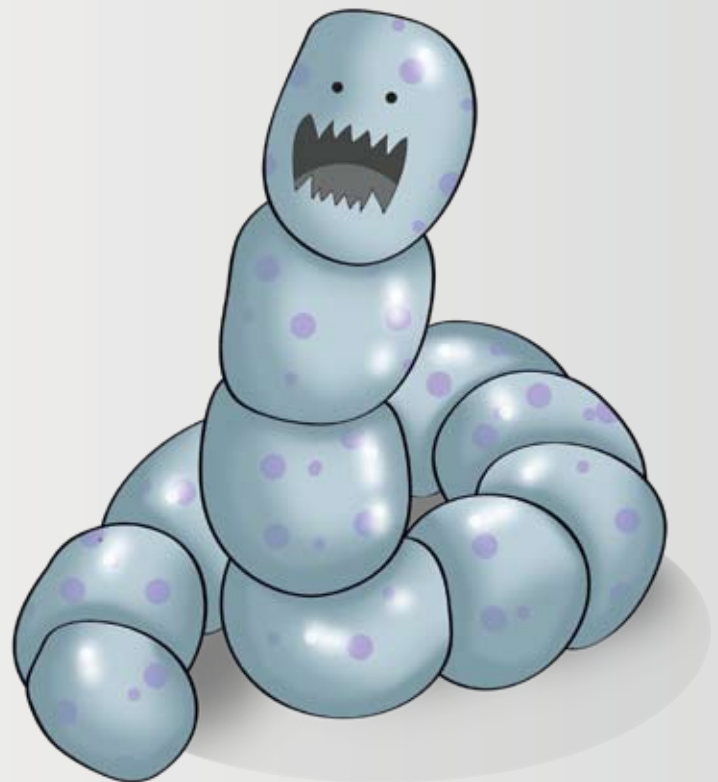
- A community-owned partnership approach

A case of rheumatic fever in the area was notified eight days after the intervention started but no new cases have since been identified. It appears that rheumatic fever has been eradicated in Whangaroa and the ecology of streptococcus A in the area has been changed dramatically.

The reasons for the success of the programme are thought to revolve around the extensive community concern that provided an incentive to solve the problem, the “bottom-up” approach, the idea of a partnership between health providers, schools and the community and the employment of passionate local Māori providers.

This community based programme has been so successful that in early 2008 it was initiated in schools in Kaikohe, Northland. It is hoped that the success of the Whangaroa initiative can be replicated.

*Thank you to **Dr Jonathan Jarman**, Medical Officer of Health, Northland DHB, for his contribution to this item.*



## Secondary prevention of rheumatic fever

The current New Zealand recommendation for secondary prevention of rheumatic fever in adults is IM benzathine penicillin G every four weeks, usually for ten years. If the IM route is not appropriate or acceptable then oral alternatives can be used. For those who are allergic to penicillin, oral erythromycin is an acceptable alternative. The dosing and duration of antibiotics for children is less clear and specialist care will be required.

This long duration of antibiotics means careful follow up is needed for all people requiring secondary prophylaxis. This relies heavily on the use of rheumatic fever registers, effective education of patients and **whānau** and ways to reduce the discomfort of the IM benzathine penicillin G injection so that compliance is high. For Māori, the involvement of experienced community based Māori health workers who have a good knowledge of their local community may provide additional support. Practice arrangements need to be supportive and flexible for those requiring long-term antibiotics.

**N.B.** The injectable forms of penicillin are free when provided through an acute rheumatic fever prevention programme.

## Make it easy for patients to come back

When a patient from a high risk group with a sore throat presents for treatment, validate their attendance and stress the importance of not ignoring their symptoms.

The need to come back has a much more specific meaning for patients who have had acute rheumatic fever. Secondary prevention with ongoing antibiotic treatment is essential.

## Form partnerships

Community pharmacists can play a key role in giving appropriate advice for people with pharyngitis and encouraging patients in high risk groups to see their GP.

Community and school based group A streptococcal sore throat detection and treatment programmes are effective.

If GPs become aware of clusters of group A streptococcal pharyngitis the Medical Officer of Health should be informed.

## References

1. New Zealand Rheumatic Fever Writing Group. New Zealand Guidelines for Rheumatic Fever. National Heart Foundation of New Zealand and the Cardiac Society of Australia and New Zealand. 2006. Available from <http://www.nhf.org.nz/files/Rheumatic%20fever%20guideline%201.pdf> Accessed March 2008
2. Population and Environmental Health Group. Notifiable and other diseases in New Zealand. Annual Report 2006. Institute of Environmental Science and Research Ltd. Available from [http://www.surv.esr.cri.nz/PDF\\_surveillance/AnnSurvRpt/2006AnnualSurvRpt.pdf](http://www.surv.esr.cri.nz/PDF_surveillance/AnnSurvRpt/2006AnnualSurvRpt.pdf) Accessed April 2008
3. Atatoa-Carr P, Lennon D, Wilson N. Rheumatic fever diagnosis, management, and secondary prevention: a New Zealand guideline. *N Z Med J* 2008;121(1271)
4. New Zealand Rheumatic Fever Writing Group. Guide for sore throat management. Algorithm 4. 2007. Available from <http://www.nhf.org.nz/files/Guide%20for%20Sore%20Throat%20Management.pdf> Accessed March 2008
5. Jarman J. How a Community Controlled the Streptococcus: school-based rheumatic fever primary prevention in New Zealand. Northland District Health Board 2007. Available from [http://www.wecanmakeadifference.org.nz/ohml/downloads/6\\_Jonathan%20Jarman.pdf](http://www.wecanmakeadifference.org.nz/ohml/downloads/6_Jonathan%20Jarman.pdf) Accessed April 2008

# Update: **Gout** in the **Māori** community

## Contributors:

**Olivia Gibbons** – BHSc/BCom student, Rheumatology Department, Counties Manukau DHB

**Dr Tony Merriman** – Senior Research Fellow (Genetics), Department of Biochemistry, University of Otago

## Key messages from “Treatment of Gout – Hit the target” BPJ 8

Gout is a major cause of arthritis in New Zealand with high rates of severe disease in Māori and Pacific peoples.

- Gout causes significant disability in Māori and Pacific men of working age.
- All patients with gout should have a cardiovascular risk assessment and intensive management of modifiable risk factors.
- Long term preventative therapy with allopurinol is critical for effective gout management.
- Diuretic therapy should be minimised in patients with gout
- Aim for a target serum uric acid level of <0.36 mmol/L

## Evidence emerging of a genetic link

Māori men have the highest reported rates of gout in the world with the most recently published estimate being 10%.<sup>1</sup>

A major factor in the higher incidence of gout in Māori is inherently higher levels of uric acid. Hyperuricaemia is likely to have both a genetic and environmental basis. Until recently very little information about the genetic basis of hyperuricaemia and gout in any population has been available. That has changed with the advent of genome-wide scanning.

A genetic variant within the GLUT9 gene which encodes for a glucose transporter has been associated with susceptibility to hyperuricaemia and gout. The GLUT9 variant has been studied in the New Zealand population as part of the “Genetics of gout in Aotearoa” study led by the University of Otago. The initial results indicate a higher level of the GLUT9 variant in Māori, which may partly explain why Māori have inherently higher uric acid levels.

## Soft drinks and gout

Earlier this year consumption of sugar-sweetened, but not artificially-sweetened, soft drinks was identified as a risk factor for gout in a study of nearly 50,000 Canadian men. Whilst it is not yet known if sugary soft drinks are a risk factor for gout in Māori, advising gout patients to avoid sugary drinks may reduce the impact of their gout.<sup>1,2</sup>

## Māori perceptions of gout

In a qualitative study undertaken by Olivia Gibbons, interviews revealed that there is still lack of awareness of gout within the Māori community. Educating people that gout can start at a young age and that it is preventable and treatable is necessary at a community level. Often their knowledge of gout was based on jokes about over-indulgence, especially of alcohol and seafood, and of gout being an “old man’s disease”. It was very common for younger males in particular to think they had a sprain or injury and therefore not seek appropriate treatment.

Normalisation of gout occurs within the Māori community. Most interview participants had a family history of gout which frequently led to them thinking that it was normal and something they had to put up with. Usually, information about what gout is, what causes it and how to treat and prevent it were not discussed. It is important that clinicians and individuals do not accept that gout is inevitable. The message needs to be:

- Gout should not be ignored
- It is treatable
- It is preventable

## Establishing relationships is important

One of the most consistent messages in interviews with Māori and their care providers was how important it is to establish a relationship. Patients interviewed during the study were more likely to demonstrate a stronger commitment to their health if they had a doctor whom they respected, trusted and with whom they had a good

relationship. This relationship was strengthened when doctors took a genuine interest in who their patients were and where they were from. Engagement with whānau was also important if lifestyle changes and the use of preventative medication were to be successful. As one clinician simply put it “care happens outside a consultation”.

Among participants in the study the key factors for effective treatment of gout were:

- The use of visual cues (e.g. graphed results showing uric acid results taken at regular time intervals)
- Receiving clear written instructions on the correct use of allopurinol
- Taking preventative medications on a regular and ongoing basis

A main theme to emerge from the study was that dietary advice was more likely to be accepted, if patients were told to moderate purine-rich foods in their diet, instead of being told to cut them out completely. Positive messages were useful in promoting adherence to preventative medication. If patients were told that they may be able to enjoy seafood and beer again in three to six months, once the allopurinol had started to work, they were more likely to continue their medication.

Three quarters of study participants also presented with hypertension, diabetes or obesity in addition to gout. These patients visited their GP on a regular basis with return visits presenting an ideal opportunity in which to screen for and treat other conditions.

**Generally, if gout is well treated, then many of the patient’s other health problems are also well treated.**



## Further reading:

“Treatment of gout – Hit the target”. Best Practice Journal. Issue 8, September 2007. Available from:

<http://www.bpac.org.nz> keyword “Gout”

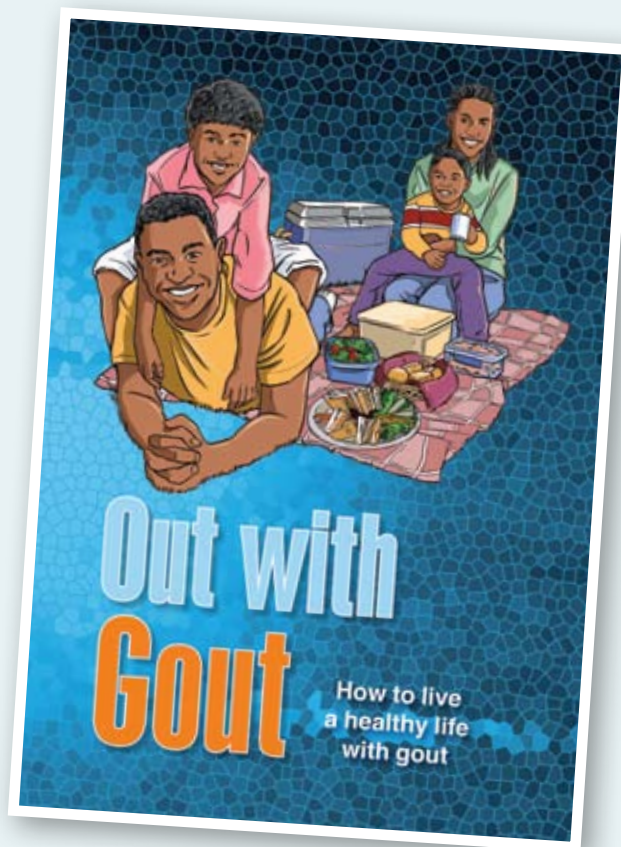
PHARMAC has recently updated their patient information brochure on gout – “Out with Gout”. This is available in English, Māori, Samoan, Tongan and Niuean language versions and can be accessed online at:

<http://www.pharmac.govt.nz/patients/campaigns#gout>

Alternatively, free hard copies can be ordered by phoning 0800 11 22 37 or emailing: [resources@pharmac.govt.nz](mailto:resources@pharmac.govt.nz)

## Acknowledgements

We are grateful to Dr Peter Gow, Dr Nicola Dalbeth, Caran Barratt-Boyes and Dr Doone Winnard for their review of this article.



**Olivia Gibbons** (Te Arawa, Tuwharetoa) is a Health Sciences student in Auckland who is undertaking a qualitative study on gout. Her work includes interviews with Māori who have gout and their care providers. This study within South Auckland builds on earlier work undertaken by Dr Karen Lindsay and aims to identify key issues specific to Māori. Olivia is currently writing up her research but has

shared some information highlighting the main themes that emerged.

**Dr Tony Merriman** and his University of Otago research team are currently researching the genetics of gout with some interesting results. See BPJ 8 for more information on Tony’s work.

1. Klemp P, Stansfield SA, Castle B, Robertson MC. Gout is on the increase in New Zealand. *Ann Rheum Dis* 1997; 56(1):22-6.
2. Gao X, Qi I, Qiao N et al. Intake of added sugar and sugar-sweetened drink and serum uric acid concentration in US men and women. *Hypertension* 2007;50(2):306-12

3. Choi HK, Curhan G. Soft drinks, fructose consumption, and the risk of gout in men: prospective cohort study. *BMJ* 2008;336:309-312.

# Demystifying Rongoā Māori: Traditional Māori Healing

## Key concepts:

- Rongoā Māori is the traditional healing system of Māori, incorporating the use of plant based remedies
- Tohunga are the practitioners of Rongoā Māori
- Establishing a good relationship with Māori patients will enable them to talk to you about the Rongoā they use
- Be aware of interactions between Rongoā and conventional treatment or medications

## History of Rongoā Māori

Rongoā Māori is the traditional healing system of Māori. It focuses on the oral transmission of knowledge, diversity of practice and the spiritual dimension of health. Rongoā Māori encompasses herbal remedies, physical therapies and spiritual healing.

Tohunga is the discipline of traditional healing and its practitioners. In early Māori history Tohunga were seen as the earthly medium of the controlling spirits and influenced all aspects of life. Illness was viewed as a symptom of disharmony with nature. If a person was sick, the Tohunga would first determine what imbalance had occurred, before the illness could then be treated both spiritually and physically.

When European settlers came to New Zealand, they brought with them new diseases, modifying the environment and changing the disease ecology of the country. This caused significant mortality among Māori from influenza, measles, whooping cough and dysentery. The Māori population continued to decline into the early 1900s until the situation was reversed partly due to health reforms including building latrines, destroying unsanitary dwellings and establishing Māori health nurses.

The Tohunga Suppression Act 1907 grew out of concern of the practice of “rogue” Tohunga who lacked the training and integrity of traditional Tohunga. Rongoā Māori was seen as unsafe and an impediment to Māori progress by the medical fraternity. A conventional western medical system was desired for New Zealand. At this time, the activity of “quack” doctors was also suppressed with the Quackery Prevention Act 1908.

The Tohunga Suppression Act was passed with support from the four Māori members of Parliament, but only Tohunga whose activities were seen as harmful, were suppressed. The legislation was never really enforced with very few Tohunga prosecuted. However the main consequence of the Act was that it pushed the practice of Rongoā Māori underground. Identities of Tohunga were kept secret and matters of Rongoā were never discussed outside of Māori communities.

### Rongoā Māori today

Despite the Suppression Act, training of Tohunga continued over the years and knowledge was passed on and developed. In 1962, as a result of a review of legislation that differentiated between Māori and Europeans, the Tohunga Suppression Act was repealed. With the resurgence of Māori culture in the past few decades Rongoā Māori has once again become prominent.

Māori view health in a holistic way, incorporating spiritual, psychological, physical and family aspects. It is perceived that conventional health services are focused on treating a person’s physical health but may not always address other aspects. Some Māori may feel that their needs are better met by engaging with their traditional healers. There may also be geographical, financial or cultural barriers to accessing mainstream healthcare for some people.

The World Health Organisation advocates the inclusion of traditional healers in national health systems. There is a call for Rongoā Māori to be formalised within the public health system in New Zealand and to exist in synergy with

conventional medical systems. The following steps have been made to this effect:

- In 1993 the National Organisation of Māori Traditional Practitioners (Ngā Ringa Whakahaere O te Iwi Māori) was established.
- In 1995 regional health authorities were able to purchase aspects of Rongoā Māori. The Ministry of Health has continued to fund services.
- In 1999 the Ministry of Health published a set of standards for traditional Māori healing.
- In 2006 the Ministry of Health released a Rongoā development plan outlining how Māori traditional healing practices will be supported within the health and disability sector. The aims of this plan are to improve the quality of Rongoā services, create leadership roles within Rongoā, increase the capacity and capability of services and develop research and evaluation activities.
- In 2007 Lake Taupo PHO signed a contract for services with the National Organisation of Traditional Healers, setting a benchmark for bridging the divide between Māori and mainstream services. The two organisations now work together to promote the benefits of Rongoā Māori.

### The practice of Rongoā Māori

Rongoā is an important aspect of health care to many Māori people despite their concurrent use of western medicine. It represents the passing on of culture and history. Traditional treatment may be sought for a variety of reasons including illness that is atypical or not responding to conventional treatment, mental illness and chronic “lifestyle” conditions such as type II diabetes.

Tohunga do not have a specific training programme or institution but are recognised experts in their field by their communities. Many learn their craft through the passing on of knowledge from elders or through apprenticeships with practising Tohunga. Knowledge and practice borrowed from western medicine may be incorporated into treatment.

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Tohunga may work alone or within a clinic (Whare Oranga) and generally do not actively advertise for patients. There is considerable variation in practice and treatment protocols and no standard consensus on diagnosis or prescription. Treatment is individualised to tribes, areas, local plant material and specific needs. Healers are thought to be more prevalent in rural areas and in the North Island.

Treatment includes plant remedies from native flora (Rongoā rākau), massage (mirimiri) and prayer (karakia). Illness is treated by addressing aspects of health including spiritual, psychological, emotional, cultural, social, environmental, family and physical health.

As part of the Ministry of Health standards for traditional healing, Tohunga must ensure that:

- Patients are aware of any follow-up treatment or consultation required
- Patients are referred to other services where appropriate, especially for emergency or acute needs
- Co-operation with other health professionals according to the wishes or needs of the patient takes place

Whare Oranga, like general practices, are required to keep records for patients they treat. These records must contain details of treatment objectives and outcomes.

Some Māori patients may be unwilling to admit to their doctor that they are using traditional healing methods. However GPs should feel comfortable asking their patients about Rongoā Māori. As for any patient, it is important to be aware of any alternative remedies that a patient is taking, to assess any possible conflict with conventional medicine or treatment.

### Plant remedies – Rongoā rākau

Plant remedies (Rongoā rākau) form an integral part of Rongoā Māori. Numerous native plants are used to treat a variety of conditions including colds, flu, gastrointestinal problems, genitourinary problems, aches and pains. Plants must be carefully prepared as some species are toxic if not used correctly. Some of the more common plants used in Rongoā Māori are listed in Table 1.

The use of plant remedies does not require regulatory approval as long as they do not contain a scheduled medicine. However, as some pharmaceuticals are derived from plants, it is possible that Rongoā may contain active ingredients. As long as these pharmaceuticals are not purposely added to a remedy no restrictions apply to the use of such plants. Note that some plants, for example St Johns wort, can interact with conventional medicines.

- Appropriate tikanga (customs and rites) must be observed during the collection, preparation and storage of Rongoā.
- Plant material must be correctly identified, gathered from non-polluted areas and prepared safely and hygienically.
- Plants are usually crushed or dried and mixed with water or ethyl alcohol.
- Plant remedies should only be prescribed and dispensed by Tohunga to individual patients. Tohunga will advise on appropriate use.
- Plant remedies should not be labelled with therapeutic claims. Labels should contain the ingredient(s), instructions for use, date of preparation, expiry date and who the remedy is prescribed for.

**Table 1:** Examples of plants used in Rongoā Māori

Māori name	Common name	Part used	Condition
Kawakawa	Māori Pepper Tree	Leaves; chewed	Toothache, swollen face, kidney and bowel stimulation
		Leaves; boiled	Boils, diuretic, “blood purification”, paipai (skin disease resembling ringworm), gonorrhoea, syphilis, arthritis, bruises
		Leaves/branches; smoke, steam	Gonorrhoea, syphilis, paipai, chest congestion
		Root; chewed	Dysentery
		Leaves; whole	Wounds, bandaging
Koromiko	Hebe	Leaves; poultice	Ulcers, venereal disease, bleeding after childbirth
		Leaves; boiled	Inhalation, throat gargle
		Leaves; chewed	Diarrhoea, dysentery, promotes hunger
		Leaves; infusion	Astringent
		Shoots; chewed	Stomach pain
Mamaku	Black Tree Fern	Bark; poultice	Boils, pus, sores, chaffing, swollen feet, sore eyes, sun burn
		Wood; gum	Stem bleeding, diarrhoea
		Shoots; boiled	Expel placenta
		Shoots; poultice	Breast pain
Karamu	Coprosma	Leaves; compress	Aches and pains
		Leaves; decoction	Cuts, sores
		Leaves/twigs; boiled	Broken limbs
		Sap	Scabies
		Shoots; boiled	Kidney/urinary problems
		Bark; infusion	Aches, pains, colds, stomach pain, nausea
Kumarahou	Gumdigger’s soap	Leaves; infusion	Coughs, colds, asthma, bronchitis, tuberculosis, wounds, skin disorders, blood purification
Manuka, Kanuka	Red tea tree, White tea tree	Leaves; infusion	Kidney and urinary problems, fever, cough, gonorrhoea.
		Bark; decoction	Diarrhoea, dysentery, pain, healing, inflamed breasts, sedative
		Shoots; chewed	Diarrhoea, dysentery
		Seeds; chewed	Stomach problems
		Seeds; poultice	Wounds
		Seeds; boiled	Anti-inflammatory
		Oil	Antiseptic
		Gum	Burns, wounds, coughing

**Table 1:** Examples of plants used in Rongoā Māori (continued from previous page)

Māori name	Common name	Part used	Condition
Mahoe	Whiteywood	Bark; inner	Burns
		Leaves; infusion	Rheumatic pain
		Leaves; boiled	Scabies
Makomako	Wineberry	Bark; infusion	Rheumatic pain
		Leaves; boiled	Eye irritation, boils, burns
Toot, Tutu, Tupakihi	Tutu*	Shoots/leaves; poultice	Wounds, bruises, sprains, swollen joints
Harakeke, Korari	Flax	Leaves/root; poultice	Wounds, abscess, swelling, chilblains
		Root; juice	Ringworm, skin irritations, flatulence, toothache
		Root; crushed	Constipation
		Root; boiled	Diarrhoea, dysentery, blood purification
		Gum	Ringworm, rheumatic pain, wounds, burns, sunburn, toothache
		Leaves; whole	Bandage, stitching wounds, splints
		Leaves; red juice	Gonorrhoea

\* All parts poisonous except for swollen petals. Contains Tutin toxin, which has caused death.

## Bibliography

Jones R.G. Rongoā Māori and primary health care. Thesis submitted for the degree of Master of Public Health. University of Auckland; 2000. Available from:

<http://www.nrw.co.nz/content/view/36/44/>

Ministry of Health. Taonga Tuku Iho – Treasures of our heritage: Rongoā development plan. Ministry of Health: Wellington; 2006.

Available from:

<http://www.moh.govt.nz>

Ministry of Health. Standards for traditional Māori healing.

Ministry of Health: Wellington; 1999. Available from:

<http://www.moh.govt.nz>

School of Pharmacy, University of Otago. Te Rongoā – Māori Herbal Medicine. Available from:

<http://pharmacy.otago.ac.nz/rongoa/index.html> Accessed

March 2008.

Landcare Research. Poisonous plants of New Zealand.

Available from:

[http://www.landcareresearch.co.nz/publications/infosheets/poisonplants/poisonplants\\_internal.asp](http://www.landcareresearch.co.nz/publications/infosheets/poisonplants/poisonplants_internal.asp) Accessed March 2008

Te Ara Encyclopaedia of New Zealand. Poisonous plants and fungi. Available from:

<http://www.teara.govt.nz/TheBush/NativePlantsAndFungi/PoisonousPlantsAndFungi/1/en> Accessed March 2008

Williams P. Te Rongoā Māori: Māori medicine. Auckland: Reed Publishing; 1996

**\*CVD Risk Assessment  
with Management**

**\*Chronic Kidney Disease**

**\*Diabetes Reviews  
& Management**

*New modules this month*

## **- Chronic Kidney Disease -**

This module is designed to aid early detection of chronic kidney disease which involves assessing and staging kidney function using a formula based estimation of GFR. Management of **CVD & Diabetes** associated risk factors is built in to the module. Such management reduces the risk of progression from early Chronic Kidney Disease to End Stage Renal Failure.

## **- CVD Quick Screen -**

This module allows quick screening for CVD risk. It supplements the current CVD Risk & Management module. Like that module, it is based on the New Zealand Cardiovascular Guidelines and utilises the *Framingham Equation* for determining a persons five year cardiovascular risk.

Contact: Murray Tilyard or Kaye Baldwin, bestpractice Decision Support, Level 7, 10 George Street, PO Box 6032, Dunedin  
phone: 03 479 2816 email: murray@bpac.org.nz or kaye@bpac.org.nz



# Ten Minute Tutorial

## Creating a cardiovascular risk assessment alert

Ideally cardiovascular risk should be assessed in all men aged over 45 years and all women aged over 55 years. Māori have an earlier onset of cardiovascular disease and therefore require cardiovascular risk assessment ten years earlier, i.e. Māori men aged 35 years and Māori women aged 45 years.

Current evidence suggests that these guideline recommendations are not being met.

This tutorial demonstrates how you can identify all Māori men aged over 35 years who are registered at your practice and add an alert to their patient files to remind you to assess their cardiovascular risk.

### 1

#### Step 1: To set up alert for cardiovascular risk assessment

1. From the menu select: Setup > Patient Register > Alert.
2. Put a code, perhaps “CVDR”, in the appropriate box and put “Carry out CVD risk assessment” in the description box.
3. Click OK, your alert is now set up for use.

### 2

#### Step 2: To run query to identify Māori men over 35 years

1. Using MedTech simply complete the query builder form as shown on next page; selecting items from the box on the left and transferring them to the appropriate box on the right of the screen.
2. Click run query.

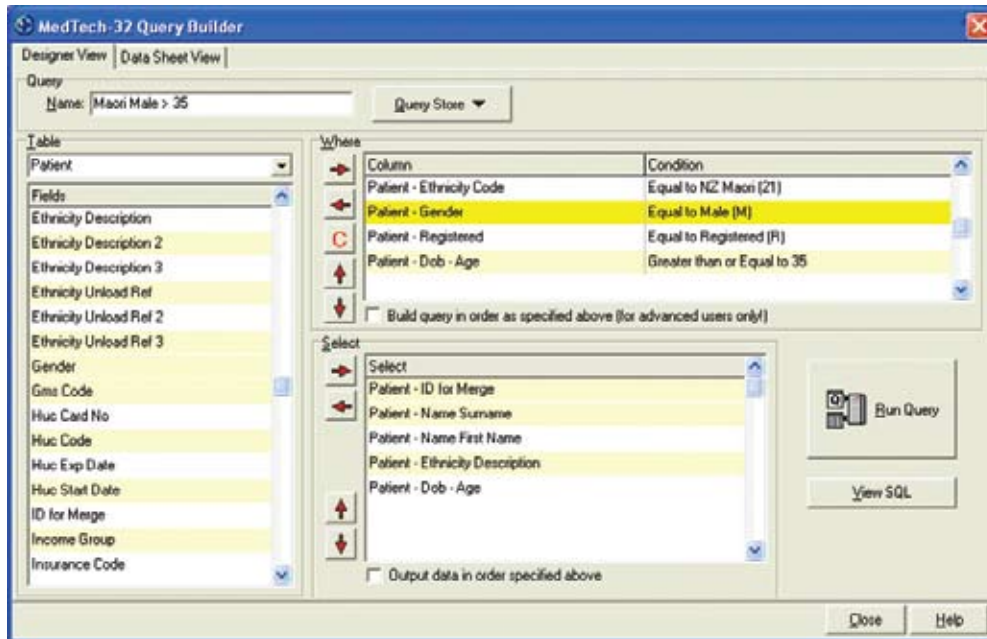
### 3

#### Step 3: To merge alert to identified patients

1. After running the query click the merge button and select Alerts.
2. Select the alert created in step 1, enter a note if required and tick auto prompt if preferred.



## Identifying Māori men aged over 35 years using MedTech 32 Query Builder



# How many patients in your practice have been taking a PPI for more than 6 months without review?

A step down regimen off a PPI, usually in 4-8 week steps, is appropriate for most patients.<sup>1</sup>

'It is recommended that within three months of initiation of treatment with a PPI, patients regimen be reviewed with the aim of reducing the dose and/or initiation of an alternative treatment option where clinically appropriate'.<sup>2</sup>

To help you manage your patients step down off a PPI, starter packs of ranitidine and patient information can be ordered at [www.gutreaction.co.nz](http://www.gutreaction.co.nz).

You can also e-mail [gutreaction@pharmac.govt.nz](mailto:gutreaction@pharmac.govt.nz)

1. Dyspepsia and Heartburn Management guidelines 2004, NZGG. 2. NZ Gastroenterology Society.

Free Starter Kit Samples of ranitidine and patient resources are available to help you manage these patients.

PHARMACY ONLY MEDICINE

**Free sample pack** NOT FOR RESALE

Fast relief from indigestion and heartburn symptoms

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To order resources go to [www.gutreaction.co.nz](http://www.gutreaction.co.nz) or fax your order direct to **0800 488 4636**.

recognise

review

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relief

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# Snippets

## **Suicidal thoughts and behaviours associated with varenicline use**

Depression and associated symptoms, including suicidal thoughts and behaviours, have been reported in patients using varenicline who are trying to stop smoking.<sup>1</sup>

Varenicline (Champix) is a non-nicotine smoking cessation aid. It is a nicotinic acetylcholine-receptor partial agonist which means that in the presence of nicotine, it blocks nicotine's ability to bind at these receptors, and in the absence of nicotine, it activates these receptors.<sup>2</sup>

In clinical trials it has been shown to be more effective for smoking cessation than bupropion. However how this translates into practice is unknown, because participants in these trials received intensive counselling in combination with varenicline therapy, and this is unlikely to be provided in general practice. The effectiveness of varenicline on long-term abstinence rates beyond 12 months has not been studied.<sup>2</sup>

Varenicline is a new drug in a new class of drugs and therefore extra uncertainty exists about its safety profile. Recent concerns about varenicline have been raised in Europe and the UK, where it has been available and monitored since December 2006. There have been reports of suicidal thoughts and behaviour in association with the use of varenicline and product information for doctors and patients is currently being updated.

The following prescribing advice was provided in the latest issue of the UK Medicines and Healthcare products Regulatory Agency Drug Safety Update:<sup>1</sup>

- Smoking cessation, with or without pharmacotherapy, may be associated with an exacerbation of underlying psychiatric illness, including depression. Care should be taken in such patients, who should be advised of this risk

- Patients should be made aware of the possibility that trying to stop smoking might cause symptoms of depression
- Patients taking varenicline who develop suicidal thoughts should stop their treatment and contact their doctor immediately

Similar early reports of psychiatric adverse effects associated with varenicline use have been published in Australia and the United States of America.<sup>2,3</sup>

The most commonly reported adverse effects include nausea, headache and insomnia.

Varenicline was first marketed in New Zealand in 2007 and as it is the first medicine of this new class it is subject to monitoring on the Intensive Medicines Monitoring Programme. All clinical events in patients taking IMMP medicines, such as varenicline, should be reported.<sup>4</sup>

Monitor all patients using varenicline for behaviour and/or mood changes.

Note: Varenicline is not currently funded in New Zealand and would cost a patient approximately \$700 for the 12-week recommended course. Nicotine replacement therapy is currently recommended as first line therapy for smoking cessation.

#### References:

1. Medicines and Healthcare products Regulatory Agency (MHRA). Drug Safety Update 2008; 1(7): 3-4. Available from: <http://www.mhra.gov.uk/drugsafetyupdate>. Accessed February 2008.
2. National Prescribing Service (NPS) RADAR. Varenicline (Champix) for smoking cessation. Available from: <http://www.npsradar.org.au/>. Accessed February 2008.
3. FDA Alert. Available from: <http://www.fda.gov/cder/drug/infopage/varenicline/default.htm>. Accessed February 2008).
4. Medsafe. Intensive Medicines Monitoring Programme (IMMP) 2007. Available from: <http://www.medsafe.govt.nz/profs/adverse/IMMP.asp>. Accessed February 2008.

## Subsidised nicotine replacement therapy is provided by more health professionals

The Ministry of Health has widened access to subsidised nicotine replacement therapy (NRT) by including all GPs, midwives, dentists, optometrists and nurse practitioners in its Quit Cards (NRT) programme.<sup>1</sup>

The Quit Cards provide nicotine patches and gum at a subsidised price; an eight week supply of patches or gum costs between \$10 – \$20. Subsidised nicotine lozenges are likely to become available on the programme mid 2008.

Quit Cards were distributed to health practitioners in late January 2008. Previously the Quit Cards were available via the free phone helpline or provided by health professionals who had completed the one day training course. This means about 15,000 health practitioners will be able to distribute the Quit Cards, without having to attend the training course, providing wider access to subsidised nicotine replacement therapy.<sup>1</sup>

This follows the release of the Smoking Cessation Guidelines which were discussed in BPJ 10 (December 2007). The guidelines stated that NRT approximately doubles the chances of long-term abstinence.<sup>2</sup>

#### References:

1. Ministry of Health. Media Release: Wider access to subsidised nicotine replacement therapy, December 2007. Available from: <http://www.moh.govt.nz/moh.nsf/indexmh/subsidised-nicotine-replacement-therapy-17dec08>. Accessed February 2008.
2. Ministry of Health. New Zealand Smoking Cessation Guidelines 2007. Available from: <http://www.ndp.govt.nz/moh.nsf/indexcm/ndp-tobacco-resources-tobacco-cessation>. Accessed February 2008

# Snippets

## Telling smokers their lung age increases their chance of quitting

Researchers in England have evaluated the impact of telling patients their estimated lung age as an incentive to quit smoking. In this randomised controlled trial, all participants were offered spirometric assessment of lung function, with the intervention group receiving their results in terms of lung age. The control group received their results as a forced expiratory volume at one second (FEV1) value only. Both groups were advised to quit and offered referral to smoking cessation services.

**Lung age:** the age of the average healthy individual who would perform similarly to them on spirometry

They found that receiving spirometry results as lung age was associated with an absolute reduction of 7.2% in smoking rate compared to receiving test results as raw FEV1 data; 13.6% of the intervention group had quit smoking compared to 6.4% of the control group. Those with worse spirometric lung age were no more likely to have quit compared with those with normal lung age. The number needed to treat (NNT) for the intervention to achieve one additional sustained quitter is 14.

The researchers concluded: “Telling smokers their lung age significantly improved the likelihood of them quitting, but the mechanism by which this intervention achieves its effect is unclear.”

**Comment:** While the researchers did not compare giving lung age against other forms of counselling or pharmacological agents, the study shows that presentation of information in an understandable and visual way that patients can relate to, seems to encourage higher levels of successful smoking cessation. This intervention may be limited by access to spirometry in a New Zealand general practice setting.

Parkes G, Greenhalgh T, Griffin M. Effect on smoking quit rate of telling patients their lung age: the Step2quit randomised controlled trial. *BMJ* 2008;336:598-600.

Available from

<http://www.bmj.com/cgi/content/abstract/336/7644/598>

### Lung age calculation tables

Bpac has developed this table based on the formulae from this study. This table is for patients with an FEV1 of 3.75 litres or less. We would be interested in your feedback on this concept.

Men Lung age (years)	Lung age= $2.87 \times \text{height (in inches)} - (31.25 \times \text{observed FEV1 (litres)} - 39.375)$						
	height (cm)						
FEV1 (litres)	160	165	170	175	180	185	190
3.75	24	30	36	41	47	52	58
3.5	32	38	43	49	55	60	66
3.25	40	45	51	57	62	68	74
3	48	53	59	65	70	76	82
2.75	55	61	67	72	78	84	89
2.5	63	69	75	80	86	92	97
2.25	71	77	82	88	94	99	105
2	79	85	90	96	102	107	113
1.75	87	92	98	104	109	115	121
1.5	95	100	106	111	117	123	128
1.25	102	108	114	119	125	131	136
1	110	116	121	127	133	138	144
0.75	118	124	129	135	141	146	152
0.5	126	131	137	143	148	154	160

Women Lung age (years)	Lung age= $3.56 \times \text{height (in inches)} - (40 \times \text{observed FEV1 (litres)} - 77.28)$						
	height (cm)						
FEV1 (litres)	150	155	160	165	170	175	180
3.5	-	-	7	14	21	28	35
3.25	3	10	17	24	31	38	45
3	13	20	27	34	41	48	55
2.75	23	30	37	44	51	58	65
2.5	33	40	47	54	61	68	75
2.25	43	50	57	64	71	78	85
2	53	60	67	74	81	88	95
1.75	63	70	77	84	91	98	105
1.5	73	80	87	94	101	108	115
1.25	83	90	97	104	111	118	125
1	93	100	107	114	121	128	135
0.75	103	110	117	124	131	138	145
0.5	113	120	127	134	141	148	155

**Notes:** Height conversion: Height (inches) = Height (cm) / 2.54. Generally, a young, fit adult will have an FVC of 4-5L and the FEV1 will be at least 75% of this.

# Evidence That Counts

## Cough and Cold Medications in Children

Journal Watch, Vol. 28, No. 6, March 15, 2008

In October 2007, following FDA review of and concerns about the safety and effectiveness of over-the-counter (OTC) cough and cold medications in children, particularly in infants, leading drug manufacturers voluntarily withdrew cough and cold medications that were labelled for use in children younger than two years. To characterise adverse drug events from OTC cough and cold medications in children, researchers used data from the Adverse Drug Event Surveillance project (representing 63 U.S. emergency departments [EDs]).

In 2004 and 2005, an estimated 7091 children (age <12 years) visited EDs annually because of adverse drug events from cough and cold medications; this number represented 5.7% of ED visits associated with adverse drug events in this age group. Most visits (64%) involved preschoolers (age range, two to five years). Two thirds of visits were for unsupervised ingestions, 26% were for supervised administration without medication error, and 8% were for supervised administration with documented error. Seven percent of children required hospital admission.

### Comment:

The debate about OTC cough and cold medications hinges on two issues—safety and effectiveness. Given that these products are not effective in children and can lead to a large number of ED visits, their use in children should be curtailed substantially.

— Howard Bauchner, MD

Schaefer MK et al. Adverse events from cough and cold medications in children. *Pediatrics* 2008 Jan 30; [e-pub ahead of print]. <http://dx.doi.org/10.1542/peds.2007-3638>

## Drug Samples: Marketing Tool or Safety Net?

Journal Watch, Vol. 28, No. 5, March 1, 2008

The billions of dollars' worth of free medication samples that are distributed in the U.S. each year are often cited as evidence of the pharmaceutical industry's philanthropy. Harvard researchers analysed data from a large nation-wide survey to determine the socioeconomic characteristics of individuals receiving these gifts.

Almost 4000 respondents (12% of the total) reported receiving free samples during 2003; 82% had stable health insurance and 72% had an income  $\geq 200\%$  of the federal poverty line. Those who visited a private medical office for care had a higher likelihood of receiving samples, as did those born in the U.S., those who spoke English and those with more education. In neither of two multivariate analyses did poverty correlate with likelihood of receiving samples. In one analysis adjusting for usual site of medical care, temporarily or permanently uninsured individuals were slightly more likely to have received samples than were those with stable insurance. The drugs most frequently named as samples were Vioxx, Lipitor, and Celebrex in 2002 and Lipitor, Allegra, and Advair in 2003.

### Comment:

These results confirm that free samples seldom fulfill the "safety net" role often claimed for them. Office-based physicians might indeed try to steer samples to uninsured patients who manage to get access to those physicians. Nevertheless, in absolute numbers, the patients who receive them the most tend to be those who need them the least. And the list of specific brands most often provided (all of which have been the subject of aggressive direct-to-consumer marketing campaigns) also suggests that free samples are just one more marketing tool.

— Abigail Zuger, MD

Cutrona SL et al. Characteristics of recipients of free prescription drug samples: A nationally representative analysis. *Am J Public Health* 2008 Feb; 98:284.

## Exercise and Advice for Low Back Pain

Journal Watch, Vol. 27, No. 15, August 1, 2007

Back exercises and advice on managing pain are both widely recommended for low back pain. Researchers tested whether these interventions, delivered at seven physiotherapy clinics in Australia and New Zealand, had any effect on pain and physical function six weeks and 12 months later. Subjects were 259 adults with low back pain for six to 12 weeks; about one third had radiation of the pain to the leg. Statistical models accounted for potential confounding variables such as pain medication use, prior surgery, and clinical site.

Compared with sham advice (empathy but no back pain advice), three sessions of physiotherapist advice over four weeks — encouraging patients to return gradually to normal activities — decreased pain at six weeks (by 0.7 on a 0 to 10 scale) but not at 12 months. Results were similar for a 12-session, six-week exercise programme (aerobic, stretch, and strengthening) compared with sham ultrasonography and sham short wave diathermy. Advice, but not exercise, significantly improved ability to perform physical activity, with improvement of 0.7 and 0.6 (on a 0 to 10 scale) at six weeks and 12 months, respectively. Compared with no intervention, advice and exercise together were associated with improved function (increases of 1.1 at six weeks and 12 months) and less pain (-1.5 points at six weeks, and a nearly significant -0.8 points at 12 months).

### Comment:

The evidence from this trial should inform the management of low back pain. Although the benefits of these interventions appear to be small and short-lived, these data support advice and exercise for low back pain.

— Richard Saitz, MD, MPH, FACP, FASAM

Pengel LHM et al. Physiotherapist-directed exercise, advice, or both for subacute low back pain: A randomized trial. *Ann Intern Med* 2007 Jun 5; 146:787-96.

## Interaction between glucosamine and warfarin

Australian Adverse Drug Reactions Bulletin, Vol 27, No 1, February 2008

<http://www.tga.gov.au/adr/aadrb/aadr0802.htm>

The Therapeutic Goods Administration of Australia has received 12 reports suggesting an interaction between warfarin and glucosamine. Most of the cases described changes in the international normalised ratio (INR) after patients previously stable on warfarin began taking glucosamine. In two cases, the INR fell slightly but in the other ten cases the INR rose (peak INR, reported in eight cases, ranged from 4.1 to 12). In most of the cases, the changes occurred from four to 20 days after commencing glucosamine and in one case, an INR rise occurred two days after the dose of glucosamine was increased. Most of the INR increases were asymptomatic but in one case a patient developed hyphaema and in another case the patient developed haemoptysis and petechiae.

The potentiating effect of glucosamine on warfarin activity has been highlighted in a report of 22 cases to the WHO Collaborating Centre for Drug Monitoring (which includes nine of the Australian reports) and also by the UK's Medical and Healthcare products Regulatory Agency which described seven cases of INR increases in patients commencing glucosamine when previously stable on warfarin.<sup>1,2</sup> The mechanism of this interaction is unknown. Product information documents for the warfarins note that "there is some evidence that glucosamine might increase the activity of warfarin" and that "all patients taking warfarin should be specifically asked if they are taking complementary medicines of any kind".

Patients taking warfarin should be advised to consider the potential for interactions with other medicines, including complementary medicines and herbal remedies. ADRAC recommends patients taking warfarin should have their INR assessed within a few days and no later than two weeks after commencing or changing the dose of a complementary medicine.

## References

1. Yue Q-Y; Strandell J; Myrberg O. Concomitant use of glucosamine potentiates the effect of warfarin (abstract). *Drug Safety* 2006; 29: 911.
2. MHRA/CSM. Glucosamine adverse reactions and interactions. *Current Problems in Pharmacovigilance* 2006; 31: 8.

## How Should We Describe Risk-Reducing Treatments to Patients?

*Journal Watch*, Vol. 27, No. 14, July 15, 2007

The way a physician describes the risks and benefits of a treatment likely influences a patient's decision about it. To explore this hypothesis, researchers in Norway surveyed a community-based sample of nearly 3000 adults. Participants were randomly assigned to receive one of three different descriptions of benefits from hypothetical therapies – drugs to prevent heart attack or hip fracture:

1. Number of patients that needed to be treated to avoid one event (NNT)
2. Short-term postponement of an adverse event for all patients
3. Longer-term postponement of an adverse event for a fraction of patients

For example, in the heart attack scenario, the NNT was 13 patients, and the postponement was either two months on average for all, or eight months for one in four patients and no benefit for the rest.

People were more likely to consent to prevent therapy for heart attack when effects were presented as NNT (93%), less likely to consent when presented as a long



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postponement for a fraction of patients (82%), and least likely to consent when presented as a short-term postponement for all (69%). Results were similar for the hip fracture scenario. Across the various descriptions, one third to one half of respondents reported difficulty understanding the benefits of the treatment.

## Comment:

We know physicians are affected by the way research results are presented (e.g., as relative vs. absolute risks). These data confirm that it matters how we tell patients about the benefits of interventions. I agree with an editorialist who suggests that when descriptions lead to different consent rates, we should describe benefits in various ways and let patients know they are numerically equivalent.

— Richard Saitz, MD, MPH, FACP, FASAM

Halvorsen PA et al. Different ways to describe the benefits of risk-reducing treatments: A randomized trial. *Ann Intern Med* 2007 Jun 19; 146:848-56.

Sox HC. Straight talk about disease prevention. *Ann Intern Med* 2007 Jun 19; 146:891-2.

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## Evidence based medicine

Dear bpac,

Thank you for your Upfront article on practising evidence based medicine in last months Best Practice Journal.

*It was pleasing to see the sacred cow of evidence based medicine revealed as a false idol. For too long we have kowtowed ourselves to the practitioners of this cult. Although in the medical profession we see ourselves as honest and wise in our practice we have been exposed as human after all.*

*The Emperors New Clothes fable has revisited us with bpac publishing this article. Hopefully it might help us pause and ask what it is in human nature that allows the many to be persuaded by the few? History is rich in what it can teach us in this regard. What safeguards might we use to prevent this happening again in medicine?*

*For me the answer lies in focusing on practising the Art of Medicine, on the surface quite the antithesis of Evidence Based Medicine. However this is not so as the Art of Medicine encompasses both. The humanity of medical care is the major part of the discipline with science an ingredient only.*

*Our professional ethos of care and beneficence is best served by practitioners who practise the art of medicine with wisdom, humility, compassion and above all a healthy scepticism for new knowledge.*

**Ken Greer, GP, Wellington**

Thanks for your comments Ken. Bpac strongly believes that clinicians should base their recommendations on the best available evidence. To do this they need to be able to appraise the evidence for its strength and relevance for the patient sitting in front of them and be alert for new evidence. We believe evidence-based medicine and patient-centred medicine are two sides of the same coin.

## Using dexamethasone for otitis externa

Dear bpac,

Why do we use dexamethasone (as in sofradex) for otitis externa? Why should we be suppressing the inflammation reaction?

**GP, Bay of Plenty**

**Definition:** Otitis externa is inflammation, often with infection, of the external ear canal.<sup>1</sup>

Solutions containing an anti-infective and an anti-inflammatory are used in otitis externa when infection is present with inflammation and eczema.<sup>2</sup>

A recent meta-analysis suggests minimal or no difference in clinical outcomes when various topical agents including, antiseptics, antimicrobials and steroid-antimicrobial combinations were compared for otitis externa.<sup>3</sup>

Other studies suggest that the addition of a steroid:

- Shortens time to treatment response and resolution of symptoms<sup>4</sup>
- Reduces inflammation and itching<sup>3</sup>

Presumably the steroid helps with associated pain and it is reasonable to suppress an inflammatory reaction if anti-infectives are present to treat any concurrent infection.

Prolonged use of topical anti-infectives is discouraged as excessive use may result in fungal infections.

## References

1. Hajioff, D. Otitis externa. *BMJ Clin Evid* 2007;12:510
2. British National Formulary (BNF). London: BMJ Publishing Group and Royal Pharmaceutical Society of Great Britain. September 2007

- Rosenfeld L, Brown C, Cannon R, et al. Clinical practice guideline: Acute otitis externa. *Otolaryngol Head Neck Surg* 2006; 134(4): S4 - S23
- van Balen F, Smit W, Zuithoff N, Verheij T. Clinical efficacy of three common treatments in acute otitis externa in primary care: randomised controlled trial. *BMJ* 2003; 327:1201-1205.

### Lithium: Baseline ECG may be required

*Re: Lithium in General Practice, BPJ 3, Feb 2007. Why is a baseline ECG required in a patient with no cardiac history?*

#### *Clinical Manager, Central Otago*


Benign, reversible ECG changes occur in 20–30% of people receiving lithium. Other cardiac changes, particularly arrhythmias, may rarely occur at therapeutic and toxic serum lithium concentrations.<sup>1</sup>

Lithium should be used cautiously in patients with pre-existing cardiovascular disease. Patients with underlying cardiovascular disease should be observed carefully for signs and symptoms of arrhythmia (including ECG measurement).<sup>1</sup>

Information regarding baseline ECG testing for all patients before commencing lithium therapy is inconsistent. The *Handbook of Psychotropic Drugs*, 13th Edition, 2003, recommends a baseline ECG for people over 45, or in a person with a history of cardiac problems. The Lithicarb FC and Priadel datasheets recommend a baseline assessment of cardiac function and periodic reassessment.

There are several reasons for conducting a baseline ECG in patients (over 45 years) with no history of cardiac problems, including:

- Lithium treatment has been associated with arrhythmias, even at therapeutic doses.
- Baseline ECG is useful for future comparison should lithium related arrhythmias occur.
- People over 45 years have a higher likelihood of underlying cardiac problems.
- A baseline ECG can be useful if other medications are added. For example, thyroxine can precipitate atrial fibrillation or angina in patients with ischemic heart disease.<sup>2</sup>

 For further details about the management of patients taking lithium see BPJ 3, February 2007.

#### References:

- American Society of Health-System Pharmacists. AHFS Drug Information 2007. Available from <http://www.medicinescomplete.com/>. Accessed April 2008.
- Livingstone C, Rampes H. Lithium: a review of its metabolic adverse effects. *Psychopharmacol* 2006;20(347):347-355.



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