

Highlights & key events of

PHARMAC invested in health by providing new or expanded access to 41 subsidised treatments



New investments include treatments for cardiovascular risk, schizophrenia, rheumatoid arthritis, osteoporosis, hepatitis, Parkinson's disease, multiple sclerosis, organ rejection, asthma, strong pain and aggressive brain tumours

Nearly quarter of a million more New Zealanders will receive subsidised medicines next year as a result of PHARMAC decisions in 2005/06

Electronic Special Authority applications launched; applications now processed while patients are still with the doctor

Record number of influenza inoculations with 761,150 doses of vaccine distributed during the four-month campaign

PHARMAC continued to provide extra value to DHBs through hospital pharmaceutical assessments and procurement, saving DHBs millions of dollars annually

PHARMAC added value to the wider health sector through negotiating contracts for bulk intravenous fluids; DHBs have requested further projects be developed next year

The PHARMAC-funded Seminar Series provides a forum for health professionals to share information and expertise, and qualify for Continuing Medical Education (CME)

One Heart Many Lives

campaign rolled out to Hawke's Bay, prompting local communities to address New Zealand's number one killer: cardiovascular disease

In this Review:

- 'Year' means year ending June 30. 'This year' means the year ended June 30 2006; 'last year' means the year ended June 30 2005; 'next year' means the year ending June 30 2007.
- · Unless otherwise stated, all values are in New Zealand dollars
- Unless otherwise stated, all references to expenditure are unadjusted for any rebates that may be due or paid by suppliers under risk-sharing agreements

PHARMAC's work of investing in the health of New Zealanders has continued during a sometimes turbulent 2006, writes PHARMAC Board chairman Richard Waddel

PHARMAC

Looking Ahead

There has been a great deal of good news this year, with many new investments and widened drug access.

PHARMAC has been in the public eye even more than usual in 2006, with calls for high cost drugs to be funded. So it's easy to overlook that it's been business as usual for us: investing in the health of all New Zealanders.

PHARMAC has two main roles. Supply side, the core of our activities, focuses on getting the best value for taxpayers' dollars in managing the community Pharmaceutical Schedule and the more recent role in purchasing of hospital pharmaceuticals. Demand side focuses on educating New Zealanders on the responsible use of pharmaceuticals. Our demand side team has been particularly proactive in recognising 'investing in health' is a partnership between New Zealand's health sector and the public. Being healthy is not just about taking pharmaceuticals, it's about taking personal responsibility and preventative measures; that's why our One Heart Many Lives campaign is being targeted at highrisk communities, and in 2006 moved into Hawke's Bay and Northland, focusing on

life style issues such as diet, exercise and smoking. [See the feature on Page 12 about Grant Smith, of Rotorua].

This year we have built on earlier efforts to listen and learn, recognising public feedback is important and helps develop some of the thinking behind our decisions. PHARMAC has a fixed budget, so must ensure it's used wisely with rigorous analysis of highly complex clinical data. PHARMAC always has to remember the greatest health gains may be made in an area where patients don't have a loud voice. In essence, PHARMAC needs to be dispassionate. Occasionally, PHARMAC's unpopular decisions are vindicated – such as the decision not to fund Cox-2 inhibitors for the treatment of arthritis, now the subject of litigation abroad.

The high-profile campaign waged to promote the funding of trastuzumab (Herceptin) for patients with breast cancer highlighted the issue of high cost medicines. PHARMAC's analytical approach will become increasingly significant with the new oncology drugs coming on-stream – at huge cost. Only a few years ago, beta-interferon (for Multiple Sclerosis) seemed breathtakingly expensive, but its cost now seems insignificant compared with the cost of drugs like Herceptin. We have to make sure our spending decisions are made with great care and based on robust analysis, ensuring New Zealanders receive

the best value for money. The danger is, if such care was not taken by PHARMAC, New Zealand's pharmaceutical costs could become crippling.

There has been a great deal of good news this year, with many new investments and widened drug access. PHARMAC made 41 new investments in pharmaceuticals during 2006, an increase on previous years, which underlines our commitment to investing in the health of New Zealanders. Pharmaceuticals play an important role in helping us to keep well, so it's particularly pleasing that this year PHARMAC has invested in many preventative drugs – alendronate for osteoporosis, salmeterol for asthma and most significantly, because of the number of people affected, low-dosage aspirin for the prevention of heart attacks and strokes.

At PHARMAC, there have been some major management changes. Wayne McNee, the Chief Executive, has been seconded to the Department of Prime Minister and Cabinet to work on transport policy. I am particularly grateful to Wayne for his outstanding contribution in guiding PHARMAC through some very difficult years; I believe our excellent results are direct testimony to his work. Matthew Brougham, an economist, is the Acting Chief Executive; a role which builds on his 10 year history with PHARMAC, most recently as manager of PHARMAC's analysis



"The 41 new investments in pharmaceuticals during 2006, underlines our commitment to investing in the health of New Zealanders"

and assessment team. The Board wishes Matthew well in taking PHARMAC into the future.

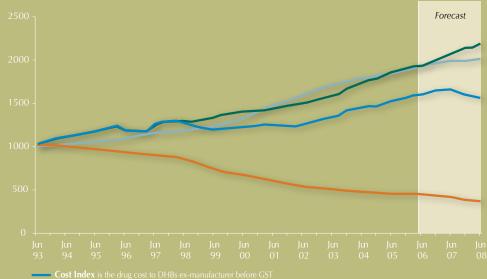
I'd also like to acknowledge the contribution made by the Board, in particular Helmut Modlik whose term ended on June 30. His particular interests in Demand Side, and identifying areas of greatest need (such as Maori and Pacific peoples) brought an important perspective to our deliberations, and will be missed. Helmut has been replaced by Kura Denness (Te Ati Awa) from Taranaki.

PHARMAC is, of course, now operating under a new Minister of Health, the Hon Pete Hodgson with whom we have already developed a very constructive working relationship. I would like to acknowledge his predecessor, the Hon Annette King, who was Minister for the first six years of my chairing PHARMAC; we had a strong working relationship and I'd like to thank the Minister for her close interest over the years.

Finally, I'd like to pay tribute to everyone at PHARMAC; it is an outstanding team which routinely demonstrates its dedication to what can, at times, be a very difficult job. I'm both grateful and very proud of their efforts, and the contribution PHARMAC makes to the lives of New Zealanders.

Subsidy, volume, mix and cost indices

-our-quarterly moving averages Base: four quarters ending lune 1993 = 1.000



- Subsidy Index is like the Consumer Price Index but for subsidised pharmaceuticals only
- Volume Index is the number of prescriptions multiplied by a standardised measure of the amount prescribed per prescriptio
- Mix Index is the residual from cost index divided by (volume index X subsidy index)

PHARMAC's processes have stood up under intense scrutiny this year, writes PHARMAC's Acting Chief Executive Matthew Brougham

Hearts and



This year was dominated by the assessment of Herceptin; we have learnt much in the process.

First, for me, has been the reaffirmation that PHARMAC's assessment processes are considered to serve New Zealand very well. I have been surprised by the number of parties, from all sides of the debate (including pharmaceutical companies), who have quietly congratulated us for focusing closely on the evidence, not the public relations hype. There has been growing recognition New Zealand's best long term interests are served by PHARMAC making these decisions on the basis of the evidence; not on the grounds of who can generate the most media and political attention. It would not be right, or fair, for PHARMAC to apply oil to the squeakiest wheel. The message has been clear. People are keen to see that PHARMAC continues to make its decisions consistently and fairly - in short, to see each proposal assessed through the same process.

Second has been the quality of the media's response. While some media were keen to ignore the detail, it is the detail, numbers and risks that ultimately really matter (and, in this case, the absolute risk reduction). And yet others discussed concepts of opportunity

cost; how could spending \$25 million a year on a single cancer treatment be justified when New Zealand spends a total of \$40 million a year on all pharmaceutical cancer treatments? What health benefits would we have to give up elsewhere in order to fund that \$25 million? And are the health benefits from Herceptin likely to be greater, or lesser, than these other treatments that might have to be sacrificed? Commentators who eventually expressed the arguments in terms of opportunity cost finally began to give voice to PHARMAC's very reason for existence. Contrary to popular belief, PHARMAC is not simply about saving money. PHARMAC's role is all about minimising opportunity cost - that means focusing on health benefit as well as dollars.

Third has been the extremely thorough work of the Pharmacology and Therapeutics Advisory Committee (PTAC) – PHARMAC's clinical advisors. New Zealanders owe these people and their sub committees a great debt. Doctors are fiercely competitive about the interpretation of scientific evidence, so it's not surprising PTAC members come under extraordinary scrutiny from their peers over their interpretations of the data provided (for a personal account, see the story on page 26 – Dr Malcolm Abernethy). With an application like Herceptin, the scrutiny is even more intense. They are not charged with determining whether there is any health

benefit from Herceptin (this 'yes/no' answer is the responsibility of Medsafe) but the amount of extra benefit relative to current treatments, which is the more difficult question of relative efficacy. Without this information, an estimate of the opportunity cost could not be made and so (again, contrary to popular belief) PHARMAC could not make a decision; our decisions are made on estimates of the health benefits gained or lost - not simply dollars.

Fourth, I'd also like to acknowledge the courage of PHARMAC's staff in aiming to make sound decisions. Many people here worked (and continue to work) long and hard in assessing Herceptin. And, in common with people all around the country, the distress and grief caused by cancer touches them occasionally through their friends and family. In amongst this emotional context of their lives, PHARMAC staff members are continually asked, as part of their job, to assess applications without passion or prejudice. There is not a single PHARMAC staff member who, if asked to justify the decision with their hearts, would stand in the way of funding Herceptin. But their duty to New Zealand is to use their minds. And that takes courage, for which I have the privilege of being able to thank them all.

To conclude, I think it's important to reiterate PHARMAC's obligation under law: to generate the maximum health benefit from



"People are keen to see that PHARMAC continues to make its decisions consistently and fairly"

pharmaceutical spending - and within the funding provided. Everything we do is rooted in this objective. On the Supply Side, we aim to stop funding things producing little or no health gain, fund what we currently fund better (through price competition), and start funding the things most likely to produce significant health gain. On the Demand Side of our business we ask ourselves what, if more prescriptions are going to be written out this year than last, would they be best written for? And what can PHARMAC do to prevent a prescription from being needed altogether; because every script not written is funding that can be used elsewhere.

That's why PHARMAC has recently developed campaigns promoting personal responsibility for cardiovascular health and, in tandem, promoting the uptake of statin therapy. Superficially these activities may look like public health campaigns, but scratch the surface and you will see they are part of meeting our legislative objective: the maximum health benefit from pharmaceuticals within a fixed budget results from the optimum mix of the pharmaceuticals available, the price paid and the amount they are used.

Impact of Pharmac on Drug Expenditure over time

Without PHARMAC's activities (assuming no other price changes would have occurred), the community drug bill in 2006 would have been \$1.03 billion higher than it was



Estimated expenditure without PHARMAC intervention

Actual and forecast expenditure with PHARMAC intervention (including rebates)

Listing changes to the Pharmaceutical Schedule

In 13 years, 1031 new or enhanced products have been listed, access has been widened for a further 210, and 1132 have either been restricted or de-listed

Decisions made

Decision type	99/00	00/01	01/02	02/03	03/04	04/05	05/06	Total since 1994
New Chemical entity listed	18	20	7	3	15	9	14	169
New Presentation listed	21	13	11	15	27	14	42	304
New Product listed	39	28	60	45	49	51	49	568
Total new listings	78	61	78	63	91	74	105	1031
Derestriction or expanded access	17	19	17	7	9	16	24	210
Changing access to improve outcome	nes						1	1
Changes that restrict or limit access	6	6	4	1	2	3	0	47
Delistings	362	135	89	196	72	59	43	1132

People can take positive steps to improve their health but medicines have an important role too, writes PHARMAC's Medical Director Dr Peter Moodie

It takes



It's easy to think good health is all about good medicine, and indeed many of us are living longer because of the advances in medical science.

In the past 60 years medical interventions have become breathtakingly sophisticated, heart bypass surgery, hip and knee replacements and even organ transplants are all now considered essential elements of healthcare. As part of those changes, new and innovative medicines like imatinib (Glivec) for the treatment of a type of leukaemia and related tumours can transform both the quality and length of peoples' lives. Although drugs like imatinib can be both new and expensive, there are plenty of older drugs - penicillin, for example, which have been around for over a half a century and cost only a few cents a day but remain essential to the health of the nation.

PHARMAC's role, however, to obtain the best health outcomes for New Zealanders, isn't just about subsidising pharmaceuticals – it's also about ensuring those medicines are used wisely. Of course, it is essential any medicines policy ensures the right mix of funded drugs is available. Those same medicines, however,

have no value unless they are used by the right people, at the right time.

This wise use of medicines is most clearly identified in the area of preventive medicine - risk reduction. New Zealand is suffering the same epidemic of diabetes and heart disease as other developed countries and everyone knows that the key to stopping the toll of illness and death from these diseases lies in fundamental life style changes. The reality is it will take time to turn around the 'lifestyle ship', so medicines that reduce risk do need to be used. Cholesterol-lowering drugs like statins, blood pressure medications like ACE inhibitors and even the use of low-dose aspirin will all help.

"PHARMAC's role, however, to obtain the best health outcomes for New Zealanders, isn't just about subsidising pharmaceuticals"

Any attempt to reduce the risks associated with diabetes and heart disease needs a holistic approach; a combination of lifestyle changes and medicines, as well as working with those known to be at risk. It is too easy to tell people what they should do; then blame them when they don't cooperate. For that reason PHARMAC has developed the

social marketing programme called 'One Heart Many Lives' (OHML).

OHML is targeted at those at high risk, particularly Maori and Pacific people who are not easily reached by the traditional medical model. PHARMAC has developed the OHML concept but does not run it as such, OHML is offered as a tool to DHBs. Primary Health Care Organisations (PHOs) and other groups wanting to make a difference. Such tools must go beyond social marketing so PHARMAC is working with a number of organisations including SPARC (through the Green Prescription programme, promoting exercise) and the National Heart Foundation to ensure health professionals, particularly nurses, have both the skills and the tools to make a difference.

Modern medicines on their own are a small but important part of the greater health of New Zealanders. If the importance of those medicines is understood, and then combined with lifestyle changes, the health gain will be enormous.



"Modern medicines on their own are a small but important part of the greater health of New Zealanders"





The Top 20 Expenditure Groups

\$ millions, cost ex manufacturer, excludes rebates and GST

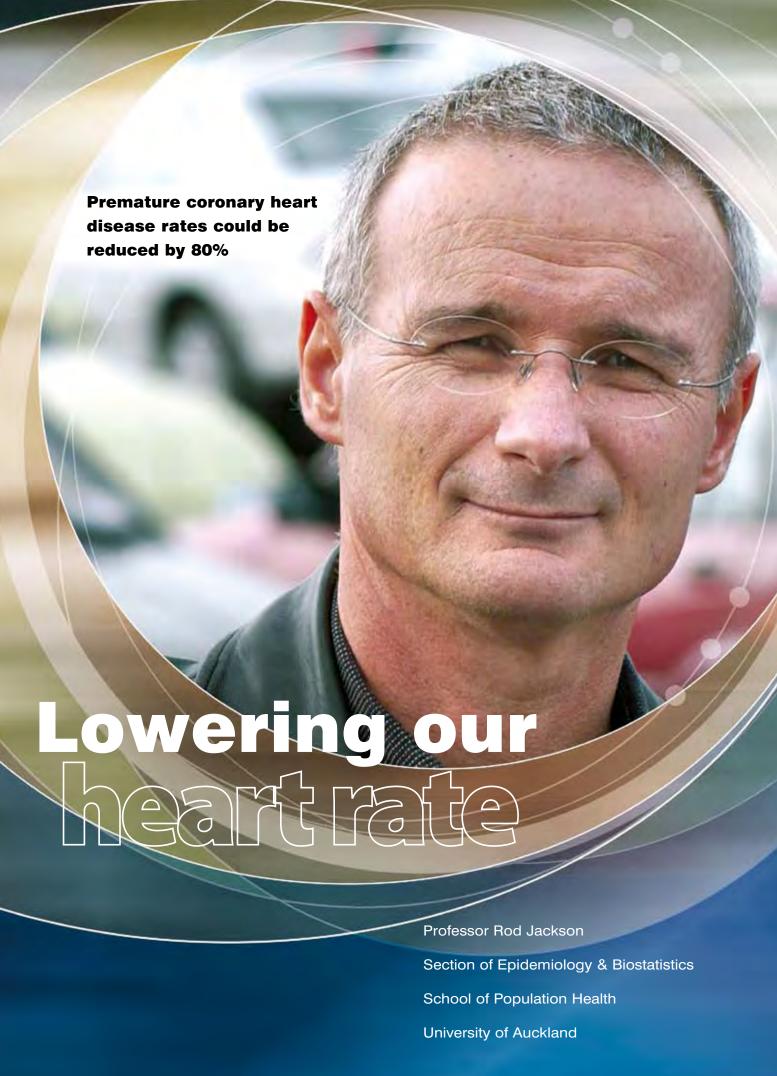
	Year Ending 30 June					
Drug Type	Jun-06	Jun-05	Jun-04	Jun-03	Jun-02	
Antiulcerants	\$73.5	\$68.6	\$64.0	\$52.2	\$44.1	
Lipid Modifying Agents	\$68.0	\$60.8	\$55.0	\$46.1	\$40.5	
Antipsychotics	\$52.9	\$48.6	\$45.2	\$40.9	\$36.7	
Antidepressants	\$29.6	\$27.3	\$27.6	\$32.8	\$28.1	
Immunosuppressants	\$28.1	\$27.8	\$19.7	\$18.1	\$16.1	
Agents Affecting the Renin-Angiotensin System	\$26.0	\$29.1	\$28.4	\$23.0	\$21.4	
Antiepilepsy Drugs	\$24.6	\$21.4	\$20.7	\$19.0	\$17.5	
Diabetes	\$22.4	\$20.6	\$19.2	\$19.0	\$18.6	
Inhaled Beta-adrenoceptor Agonists - Long Acting Inhalers	\$21.6	\$18.6	\$14.3	\$10.0	\$6.0	
Beta Adrenoceptor Blockers	\$21.2	\$17.6	\$11.5	\$9.2	\$8.0	
Diabetes Management	\$16.2	\$19.5	\$19.8	\$19.4	\$18.1	
Analgesics	<i>\$15.6</i>	\$14.5	\$16.5	\$16.9	\$15.9	
Inhaled Corticosteroids - Metered Dose Inhalers	\$14.2	\$14.6	\$14.9	\$20.7	\$21.9	
Antibacterials	\$13.8	\$13.9	\$13.1	\$14.6	\$15.4	
Calcium Channel Blockers	\$13.6	\$13.0	\$16.4	\$13.8	\$13.9	
Chemotherapeutic Agents	\$13.6	\$11.3	\$10.9	\$5.1	\$1.1	
Antimigraine Preparations	\$13.1	\$12.4	\$12.2	\$11.2	\$10.5	
Calcium Homeostasis	\$11.8	\$9.8	\$8.3	<i>\$7.7</i>	<i>\$5.7</i>	
Trophic Hormones	\$11.3	\$10.8	\$9.6	\$8.5	\$7.7	
Antianaemics	\$11.2	\$9.2	\$7.0	\$4.1	\$4.8	



Simon England, PHARMAC's

communications manager, used to work

at New Zealand Press Association - in Wellington, and London. "As a journalist, I was a generalist. I knew a little about a lot; at PHARMAC, it's the reverse - I have a very detailed knowledge of a rather narrow field!" He admits the role at PHARMAC can be challenging, but finds that stimulating, and loves the precision required. "And the people; I really love working with the PHARMAC team." He's a family man, married with three young children and living in the Hutt Valley. Simon's a keen harrier, having run four marathons (with another in his sights in 2007), loves reading modern fiction (when he's not running up and down Wellington's hills) and, as he points out, three children don't leave much time for leisure.



New Zealand has high rates of heart disease by world standards but that doesn't have to be the case, writes Professor **Rod Jackson**



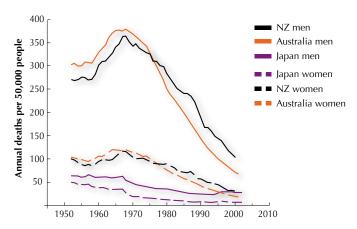
Premature coronary heart disease rates could be reduced by 80%. Coronary heart disease (CHD) is the leading cause of death in New Zealand, accounting for more than one in five of all fatalities; but a lot more could be done to reduce premature CHD.

About 15 New Zealanders die from CHD every day, statistically speaking, that's more than one every two hours. Five of these people are younger than 75 years old. The good news is New Zealand's CHD death rates are falling (now only one-third the levels of the late 1960s); the bad news is almost no one should die prematurely from CHD, defined arbitrarily as a death before age 75 years (or perhaps even 85 years). We still have a long way to go.

The graph shows just how far we could lower CHD death rates. There's no reason why New Zealanders shouldn't have rates at least as low as the Japanese, which are only one quarter to one third of our current rates. Even Australians are doing better than us, despite having higher rates in the late 1960s.

Fortunately we know how to prevent and treat most premature CHD. The major causes are well known: raised blood cholesterol (due primarily to a diet high in animal and dairy fat), raised blood pressure (due largely to an excess of energy intake over energy expenditure, too much alcohol and too much

Annual deaths from CHD per 50,000 'middle aged (50-64 yrs) men or women2: selected Asia Pacific countries



Standardised to the age and sex distribution of the 2002 UK population, 3-year weighted averages. ²women represented by interrupted lines

Figure produced by Dr Gary Whitlock in 2005 (Clinical Trials Service Unit, University of Oxford).

salt) and cigarette smoking. These three factors account for about 80% of all cases of CHD ² in western populations, so we should be able to reach Japanese CHD death rates - if we change our behaviour.

Tobacco consumption has fallen dramatically over the last 30 years, helped by high sales taxes and the more recent smoke-free environment legislation. But 90% of adult New Zealanders would benefit by lowering their blood cholesterol and 75% by lowering their blood pressure ³. Innovative taxation and legislation could help reduce the nation's blood cholesterol and blood pressure to healthy levels. While proposals for fat taxes have not gained much traction, removing GST from fresh fruit and vegetables could be a more acceptable approach and will make it easier for people to replace animal fat and other energy dense food with healthier alternatives. The current plan to remove sugar-sweetened soft drinks from schools is another useful strategy.

For the 10-20% of adult New Zealanders at high CHD risk, a cheap polypill (combining aspirin with blood pressure and blood cholesterol lowering drugs) may be a very cost-effective and widely acceptable clinical intervention. The first clinical trial of a polypill is soon to start in New Zealand and is predicted to reduce CHD risk by up to 80% 4.

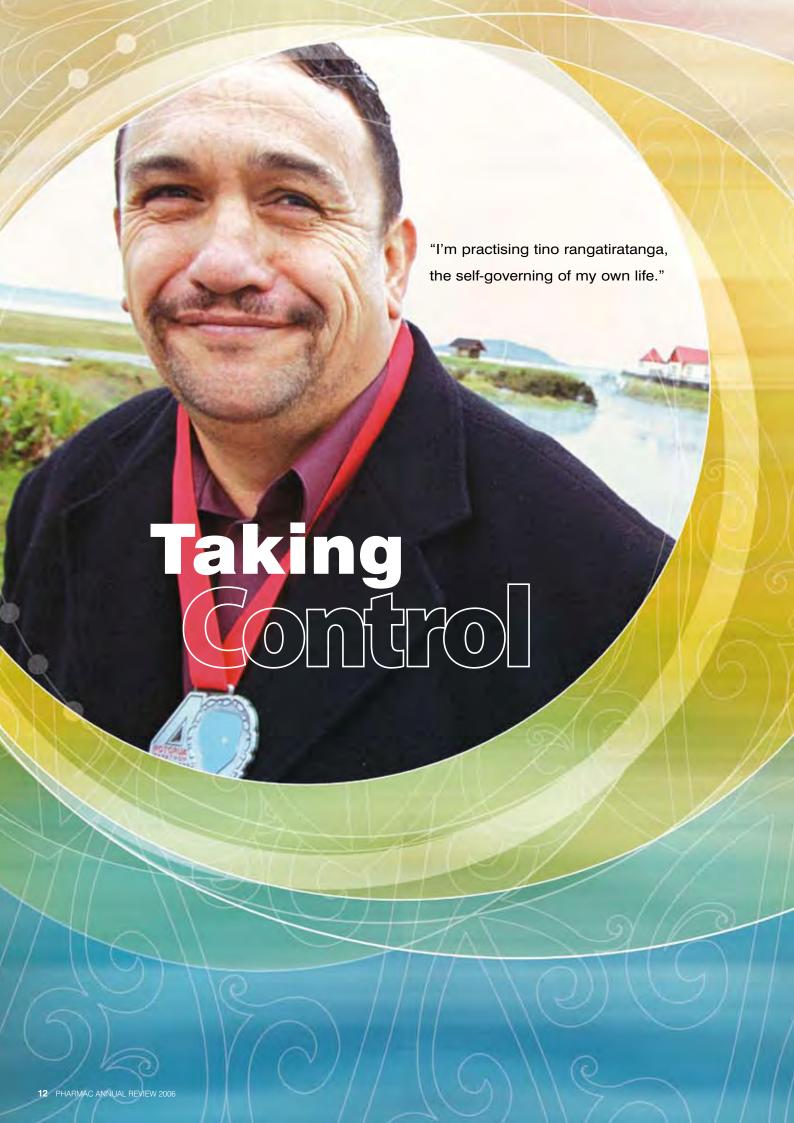
The combination of public health and clinical interventions could lower our premature CHD rates by 80%. Many of us will still die of CHD, it will just happen much later. The death rate will always be 100% but timing is everything.

National Heart Foundation of NZ. Cardiovascular disease in NZ. Technical Report No 82. Oct 2004

² Magnus P, Beaglehole R. The real contribution of the major risk factors to the coronary epidemics. Arch Intern Med 2001; 161:2657-60 ³ Metcalf P. The Auckland Diabetes Heart and Health Study

^{2003-4 (}unpublished data)

Wald NJ, Law MR. A strategy to reduce cardiovascular disease by more than 80%. Br Med J 2003 (bmj.com 2003; 326:1419)



Grant Smith (Tühourangi, Ngāti Raukawa, Te Rarawa) is living proof that making lifestyle changes can make a huge difference to life.

Grant Smith can't believe how much his life has changed, since he took control of his body nearly four years ago. He was 44 years old, weighed 190kilos, had Type 2 diabetes, and couldn't get a job. Now he's shed 55 kilos, exercises for two hours every day, his diabetes is under control – and he works in schools and businesses to promote positive healthy lifestyles.

"I've become self-governing; I'm in control of my life now. It's like being given a new world, after years of being unemployed because I was so big. And now I work for my local runanga, in the health area! It's almost unbelievable," says Grant.

Grant's wife, Dawn, died in 2002 from diabetes-related complications; her last request was for Grant to look after their 20year-old son. "He's also a big boy, but he's playing rugby now and that's great. We've got to look after our kids; so many of us are not good role models. I feel so sorry that we encourage our kids to have poor lifestyles, and now so many of them are overweight.

"I never went near a doctor, because I knew I'd be told to lose weight. Why pay \$50 to be told that? I didn't take any medicines, because I didn't get any medical advice! I used to measure my blood sugar on my wife's diabetes counter, but that was hopeless, because it was off the scale.

"I realised I had to do something, so I had my weight checked by the doctor. I thought I weighed about 150kg, so when the doctor said I was 190 kg I was so shocked that I

"First I focused on my eating habits. I used to eat anything, and everything, and lots of both. I've stopped eating red meat and bread; instead I eat a lot of vegetables, chicken and fish. Then I added in lots of exercise. I walked

a marathon last year, but it was a bit tough on my knees so I've switched to aqua-jogging twice a day. I love that - it's low impact but still a great work out. I love it, and being in the water is so relaxing.

"I'm really proud of myself now, and I have heaps of energy. I'm not taking any medications, but I get checked every three months or so. My heart beat is a bit irregular; it's permanently damaged from when I was

"It is getting harder to lose weight now that I've reached a plateau, but I'd like to shed another 35 kg; I'd like to weigh 100 kg. Yes, I've had to buy a lot of new clothes, and it's great to be able to buy things in a shop - before all my clothes had to be specially

"People have to take responsibility for themselves, and their children. Make those important lifestyle changes while you can; make those changes - and keep at it! Exercise every day, and think about what you

"I want to be seen by my whanau, hapu and iwi as a positive role model - so I don't drink, I don't smoke and I certainly don't do drugs. I'm practising tino rangatiratanga, the selfgoverning of my own life."

"I want to be seen by my whanau, hapu and iwi as a positive role model"



Have a healthy heart

If you want to die young, spend the evening in front of television with fish 'n chips and a fizzy drink. Heart disease is New Zealand's Number One Killer, with close links to obesity. For about one third of heart attack victims, their first symptom is their last - and half those deaths occur before the hospital is reached. Because if your heart stops pumping, so do you. The statistics are horrible, but you don't have to be one.

The good news is that by looking after your heart, taking personal responsibility for your own health, you'll live longer and better. Many of the causes are preventable. Getting off your backside may save your life.

So here are some tips toward a healthier and longer life:

Change your Eating Habits:

- Increase the quality of the food you eat; decrease the quantity
- Eat plenty of fruit and vegetables, whole grain products, fish, nuts and pulses
- Cut back your consumption of animal fats (meats, butter. cheese): choose fats like avocados and olive oil
- Choose low-fat versions of dairy products
- Avoid takeaways, sweets and junk food; fried food is a killer
- Restrict salt and sugar intake
- Always eat breakfast and have at least three meals every day
- Use healthier cooking methods: steaming, boiling, grilling or baking; barbeque through the summer

Change your Lifestyle:

- Drink at least 6-8 glasses of water a day
- Exercise daily for a minimum of 30 minutes; stop
- Children should have an hour of brisk physical activity every day
- Chill out reduce your stress levels
- Limit your alcohol intake
- Stop smoking!

See your Family Doctor:

- · Have regular medical check-ups
- Get your blood pressure & cholesterol levels checked regularly
- Ask whether you should be taking low-dose aspirin, to reduce your risk of heart attacks & strokes
- If you are prescribed heart medicines; take them

Remember: We're all human: if you slip up, get back on track - with increased determination

Therapeutic Group



2005/06 was a big year for PHARMAC, which lived up to its mission of 'investing in health' with 41 new investments. This is a significant increase on previous years, meaning PHARMAC's recent decisions now provide access to subsidised medicines for an additional 236,000 New Zealanders.

Improved data means more is known about who takes what, and why. For the first time, for example, it's been identified that 2.5 million people had subsidised pharmaceuticals last year; about 62% of New Zealanders. Better data also means PHARMAC can look at prescribing patterns for different ethnic groups - this could be enormously beneficial in reaching out to people with vulnerabilities to specific diseases; Maori and Pacific peoples, for example, are more likely to develop Type 2 diabetes and cardiovascular-related ailments. PHARMAC will develop this analysis more in the coming year.

28.5 million subsidised prescriptions were written, for at least 2.48 million individual New Zealanders. That's a 4.5% increase in prescriptions over 2004/05, which had a record 10.7% increase on previous years, believed to be a one-off spike due to the switch to PHOs. This increase of around 4.5% shows a return to the regular pattern, although the numerical increase (around 1.3 million more prescriptions) is still highly significant.

Key investments:

PHARMAC's two biggest investments, in terms of dollars, were the extension of access to the antifungal terbinafine which cost \$2.7 million for the 10 months after listing, and gabapentin (to include neuropathic pain) costing \$2.3 million.

The largest numbers of new patients were the 137,000 using low-dose aspirin for the four months following listing, followed by 12,000 (in 10 months) for terbinafine, 6,800 taking salmeterol in its first eight months of subsidy and 5,800 new patients taking gabapentin for neuropathic pain.

PHARMAC estimates that at least 180,000 new patients were treated with newly subsidised medicines in 2006; these numbers will increase significantly (to around 236,000) when the subsidies have been in place for a full year.

Temozolomide, for the most aggressive types of brain tumours (gioblastomas), is the highest-cost medicine funded this year, at around \$50,000 per patient.

One of the largest investments by value was the decision to fund the new generation arthritis treatment adalimumab (Humira), a TNF alpha inhibitor drug. This significant investment, which can help people with arthritis return to more active lives, is estimated at around \$35 million over five years.

PHARMAC continues to assume management of hospital expenditure on cancer treatments, which has already led to substantial savings for DHBs through the introduction

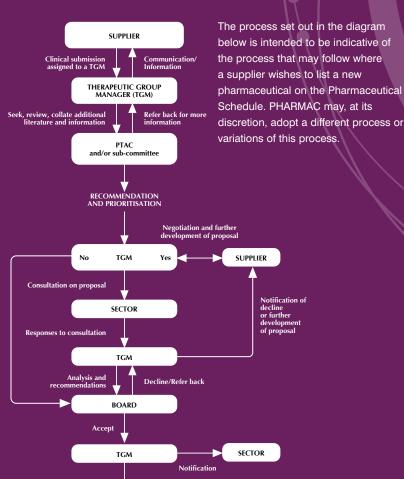
of competition (generics, in particular). PHARMAC faces some increasingly difficult decisions in the next few years, with the growth of very highly-priced pharmaceutical treatments, particularly in oncology.

Investment by Therapeutic Group



- Alimentary tract and metabolism (20%)
- Blood and blood forming organs (13%)
- Cardiovascular system (11%)
- Dermatologicals (2%) Hormone preparations – systemic excluding contraceptive hormones (5%)
- Infections agents for systemic
- Nervous system (21%)
- Oncology agents and immunosuppressants (7%)
- Respiratory system and allergies (9%)
- Other (genito-urinary system, musculo-skeletal system, sensory organs, spécial foods)

Process for listing a new pharmaceutical on the Pharmaceutical Schedule



Top 20 most prescribed medicines

SCHEDULE ANALYST (Updates Schedule)

Year ending June 2006

Most commonly prescribed subsidised drugs. Note: This does not include non-subsidised prescriptions (i.e. those paid for by the patient or those where the cost falls under the patient co-payment).

Chemical Name	Treats	Prescriptions
Paracetamol Paracetamol	pain relief	1,411,406
Simvastatin	raised cholesterol	1,018,202
Omeprazole	heartburn, stomach ulcers	956,325
Amoxycillin Clavulanate	bacterial infections	740,550
Amoxycillin	bacterial infections	716,345
Metoprolol Succinate	heart disease	645,656
Salbutamol	asthma	640,413
Aspirin	pain relief/cardiac disease	486,692
Frusemide	raised blood pressure	405,514
Fluticasone	asthma	402,181
Cilazapril	raised blood pressure	401,301
Quinapril	raised blood pressure	<i>391,579</i>
Diclofenac Sodium	pain relief	385,254
Prednisone	steroid treatment for asthma, arthritis etc	346,059
Bendrofluazide	raised blood pressure	344,922
Felodipine (raised blood pressure)	raised blood pressure	333,892
Zopiclone	insomnia	319,163
Calcium Carbonate	mineral supplement	301,624
Flucloxacillin Sodium	bacterial infections	289,373
Thyroxine	underactive thyroid gland	286,213

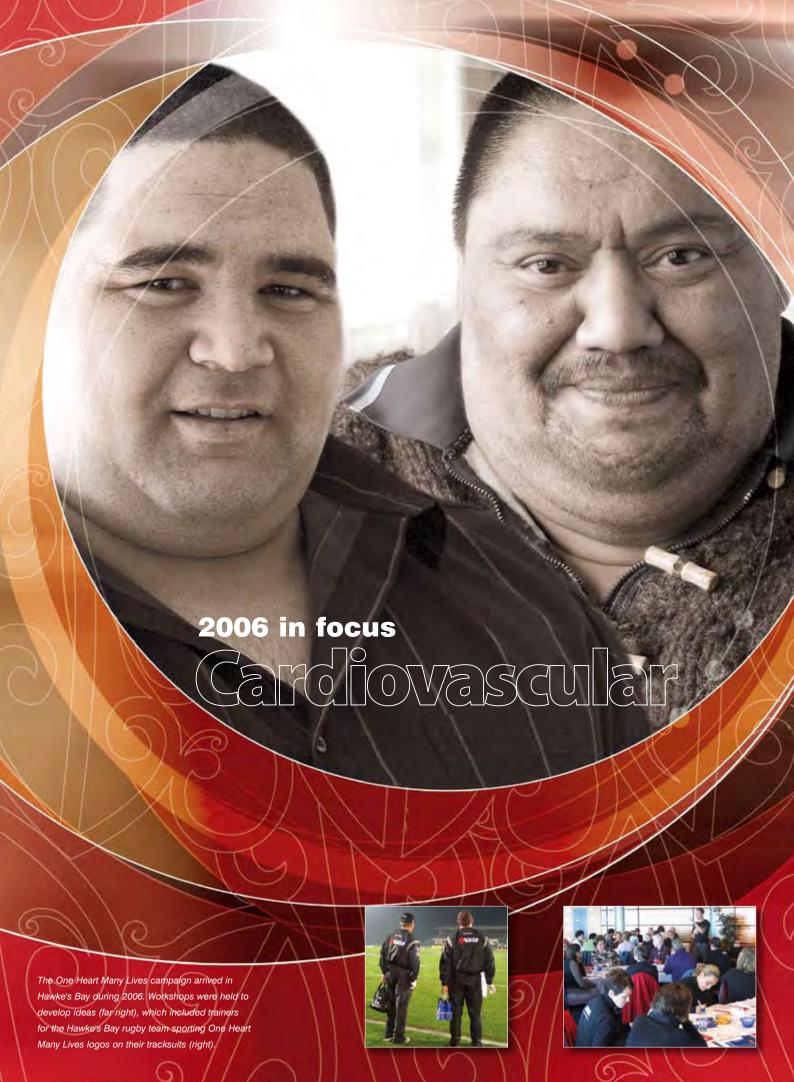
PHARMAC's Decision Criteria

Seeking best health value for the pharmaceutical dollar

PHARMAC seeks to operate in an open. transparent and accountable way. Its reviews and changes to the Pharmaceutical Schedule are governed by its Operating Policies and Procedures - a public document developed in-consultation with the pharmaceutical industry. The document emphasises the importance of basing decisions on the latest research-based clinical information, and it sets out criteria to be taken into account in decisions about the Schedule.

These criteria are:

- the health needs of all eligible people within New Zealand;
- the particular health needs of Maori and Pacific peoples:
- · the availability and suitability of existing medicines, therapeutic medical devices and related products and related things;
- · the clinical benefits and risks of pharmaceuticals;
- · the cost-effectiveness of meeting health needs by funding pharmaceuticals rather than using other publicly funded health and disability support services;
- · the budgetary impact (in terms of the pharmaceutical budget and the Government's overall health budget) of any changes to the Pharmaceutical Schedule:
- the direct cost to health service users;
- the Government's priorities for health funding, as set out in any objectives notified by the Crown to PHARMAC, or in PHARMAC's Funding Agreement, or elsewhere; and
- · such other criteria as PHARMAC thinks fit. PHARMAC will carry out appropriate consultation when it intends to take any such "other criteria" into account.
- As defined by the Government's then current rules of eligibility.



Heart disease is killing our community

PHARMAC listed two brands of low-dose aspirin to help people wanting to reduce their chances of a heart attack or stroke. Many people already buy low-dose aspirin over-the-counter and it's anticipated up to 200,000 New Zealanders could now have it prescribed, and subsidised by the Government. Many patients immediately took up this opportunity; by the end of the year 120,000 people were receiving subsidised low-dose aspirin. It's a highly cost-effective investment with people enrolled in PHOs paying only \$3 for a 90-day prescription. Expenditure is estimated at \$17 million over five years, largely because of the large patient group size.

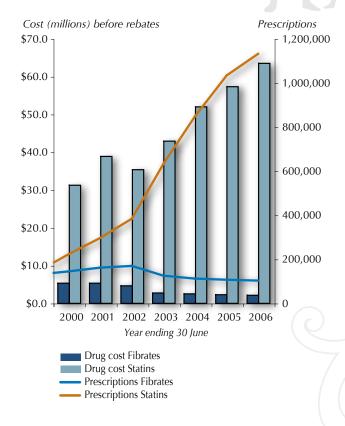
Statins continue to be one of the health sector's good news stories, with nearly 300,000 New Zealanders taking them to reduce their cholesterol levels. Although the uptake in statin use is gratifying, PHARMAC wants to ensure the most at-risk groups are accessing statins (and other cardiovascular medications); this led to the One Heart Many Lives campaign being extended to the Hawke's Bay.

OHML is a social marketing campaign to raise awareness of cardiovascular disease and promote lifestyle changes for the people at highest risk - men (especially Maori and Pacific) aged 35 and over. The campaign promotes lifestyle changes such as increased physical activity, better diet and stopping smoking and, where appropriate, the use of medications such as cholesterol-lowering statins or blood pressure management drugs. It dovetails nicely with another initiative PHARMAC helps to fund - the SPARC-led Green Prescriptions programme.

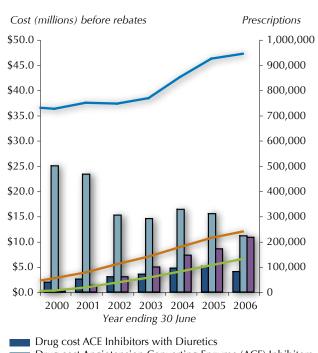
OHML has been run successfully in Porirua, Gisborne, Rotorua and south Auckland. In 2006 PHARMAC, the Hawke's Bay DHB, the National Heart Foundation and community agencies worked together closely to bring the campaign to the Hawke's Bay with a number of innovative measures promoting the campaign's messages: including the development of a mini-documentary, text messaging to encourage and remind people about lifestyle issues, and a partnership with the Hawke's Bay rugby union so the Hawke's Bay Magpies rugby team wore One Heart Many Lives logos on their jackets during training. Northland is the next target area for OHML.

Cholesterol treatments

Prescriptions for statins continued to increase, reflecting open access and promotion of their use. More than a million prescriptions, or a quarter of a million patients, were subsidised in 2006.



Blood pressure management



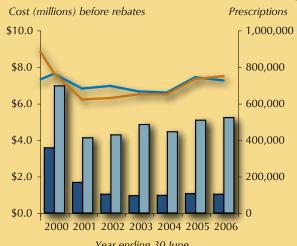
- Drug cost Angiotension Converting Enzyme (ACE) Inhibitors
- Drug cost Angiotension II Antagonists
- Prescriptions ACE Inhibitors with Diuretics
- Prescriptions Angiotensin Converting Enzyme (ACE) Inhibitors
- Prescriptions Angiotensin II Antagonists

WISE USE OF ANTIBIOTICS

PHARMAC's Wise Use of Antibiotics campaign continues to receive a high level of media attention, despite being in its 10th year. In 2006 the campaign messages emphasised that personal hygiene helps prevent the spread of infections like colds and 'flu, tying in with a campaign run by the Ministry of Health. PHARMAC and the Institute of Environmental Science and Research (ESR) released data showing New Zealand's performance in controlling the spread of antibiotic-resistant 'superbugs' is improving, compared to other countries. PHARMAC recorded a slight rise in the number of prescriptions written for antibiotics, following years of continually declining use.

As part of the Ministry of Health's influenza pandemic preparations, PHARMAC secured national supplies of antibiotics and with the Ministry, developed a plan for these antibiotics to be held at DHB Hospitals. This additional unanticipated purchasing cost \$5.5 million.

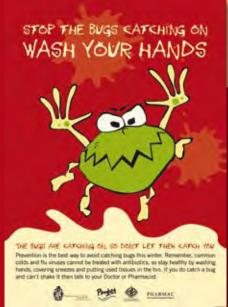
Antibiotics



Year ending 30 June

Drug cost Amoxycillin Drug cost Amoxycillin Clavulanate

Prescriptions Amoxycillin Prescriptions Amoxycillin Clavulanate









Widened access to all antiretrovirals for people with HIV will help prevent transmission of this disease from pregnant women to their unborn children, and from mothers to newborn babies. This brings New Zealand's treatment for people with HIV/AIDS into line with international guidelines.

The combination treatment lopinavir with ritonavir (Kaletra) was initially subsidised as a last-line therapy but patients now have widened access following PHARMAC's commitment to review access after six months of its listing. Kaletra will now be used earlier in the treatment of HIV/AIDS; it is expected the number of patients using it will double. The additional cost will be partially offset by a reduction in other products, with an estimated net cost of \$1.2 million over five years.



2006 in focus

People with severe neuropathic pain, such as 'phantom limb syndrome' after amputation, will benefit from PHARMAC's decision to widen access to gabapentin (Neurontin), already subsidised as a treatment for epilepsy. Neuropathic pain is also experienced by people with spinal injuries, diabetes, multiple sclerosis or who have had chemotherapy. PHARMAC estimates between 3,000 and 5,000 people will be prescribed subsidised gabapentin, at a cost of more than \$18 million over the next three years.

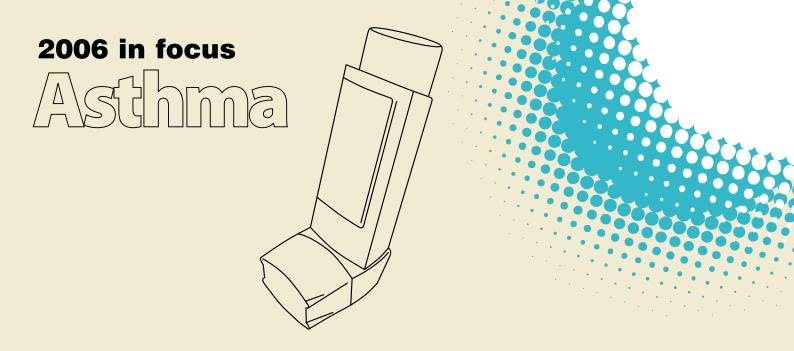
There are now more than 25 subsidised pain relief treatments, from paracetamol and aspirin to the more potent treatments such as morphine and fentanyl. A further addition to this range of strong painkillers was the opioid-based drug oxycodone, funded from 1 August 2005. Oxycodone can be used as an alternative to the `gold standard' pain relief treatment morphine, although PHARMAC anticipates that, long term, morphine will remain the pain relief treatment of choice. A range of oxycodone tablets and capsules are subsidised with expenditure estimated at \$5 million over three years.

Staff in



Dilky Rasiah, PHARMAC's deputy medical director, has now been with PHARMAC for 10 years - one of its longest-serving staff members. Dilky studied medicine at Otago and is a member of the Royal Australasian College of Medical Administrators (MRACMA). "It's really important that doctors get involved in health administration, so we can influence decisions and contribute a medical perspective to decisions."

Dilky was born in Sri Lanka, emigrating with her family to Wellington when she was a child; she's now married and the mother of two young boys. She's involved in the Sri Lankan community, because she feels it's important for her children to know their cultural heritage. Dilky teaches Sunday school at the weekend, and serves on a crèche committee. "PHARMAC is a good employer, and very family-friendly, making it relatively easy for me to juggle my family and professional commitments".

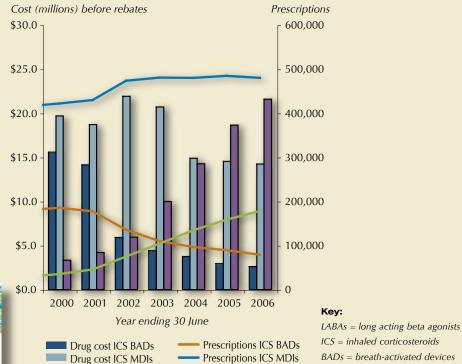


PHARMAC widened access to the long-acting asthma reliever salmeterol (Serevent) from 1 November 2005. Salmeterol, a long-acting beta agonist (LABA), is used by people whose asthma is not adequately controlled using inhaled corticosteroids such as fluticasone (Flixotide), budesonide (Pulmicort) or beclomethasone (Beclazone). The Special Authority restriction was removed, with salmeterol now subject to a prescribing guideline. New Zealanders prefer the aerosoltype 'puffer' inhaler used for salmeterol, rather than the alternative dry powder devices. The decision means another 15,000 people will probably use LABAs, which would mean additional expenditure of \$8 million over the next five years.

Asthma

A continued increase in prescribing of LABAs, with an associated increase in cost, was the most noticeable trend in 2006. Prescription numbers were steady for the main asthma preventer inhalers (inhaled corticosteroids).

Prescriptions LABAs





A PRESCRIBING GUIDELINE PHARMAC

Drug cost ICS MDIs Drug cost LABAs

BADs = breath-activated devices MDIs = metered-dose inhalers (aerosols)

PHARMAC ###

Cancer

& transplant drugs



Heart and kidney transplant patients were able to access the anti-rejection drug mycophenolate from October 1 2005, after PTAC's new Transplant Immunosuppressant sub-committee spent 18 months reviewing transplant immunosuppressants. Mycophenolate is one of a range of drugs that helps prevent people's immune systems reject newly-transplanted organs. PHARMAC's negotiations resulted in wider access than initially recommended. There are approximately 120 kidney transplants and 10-20 heart transplants per year in New Zealand, Most of these patients will be treated with mycophenolate, at a cost of about \$8 million over five years.

Oral liquid mycophenolate has also been listed; this is mainly for the treatment of children.

Patients with the most aggressive form of brain tumour (glioblastoma multiforme) had access to temozolomide (Temodal) from 1 May 2006. Temozolomide can help patients live longer. Funding is for newly-diagnosed patients undergoing radiotherapy and for a further six cycles of treatment following radiotherapy. Temozolomide is less cost-effective than some other treatments PHARMAC was considering, but the listing was justified due to the limited treatment options. The estimated cost is \$6.5 million over five years.

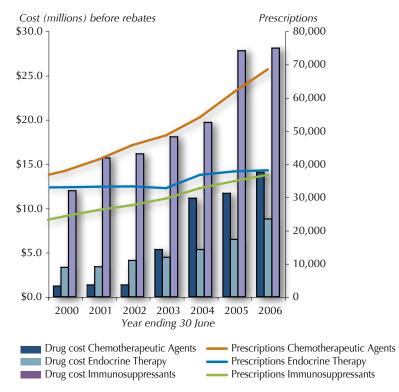
New generation aromatase inhibitor hormone drugs letrozole and anastrozole are now listed for some women with early breast cancer, in addition to those with advanced breast cancer. The drugs are largely targeted at women who cannot take tamoxifen, and can be accessed for early breast cancer once a course of tamoxifen has been completed. It's estimated 1,200 additional patients will be eligible, and expenditure on aromatase inhibitors will increase by more than \$11 million over the next five years.

As PHARMAC moves to take over management of cancer drugs used in hospitals, a number of decisions were put in place in 2005/06. Oxaliplatin (Eloxatin), a hospital-administered drug for metastatic colorectal cancer, is now available as a first-line treatment in combination with other chemotherapy drugs. It's estimated about 1,000 people are treated for this cancer every year.

Gemcitabine, another hospital-administered cancer drug, also had access widened and can now be used in DHB hospitals for advanced bladder cancer. DHBs agreed to PHARMAC widening access to taxanes for early breast cancer, a decision to be implemented in the 2006/07 financial year.

Oncology and immunosuppression

Prescriptions for cancer drugs rose in 2006 while expenditure is now more than \$14 million per annum.





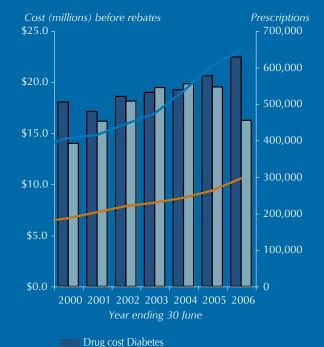
More patients with Type 2 diabetes have access to the new generation treatment pioglitazone (Actos) which was first subsidised in 2004 as a therapy on its own, or in combination with drugs known as sulphonylureas (glibenclamide, for example). Pioglitazone improves the body's ability to use insulin, the hormone which reduces blood glucose levels, leading to better control of blood sugar levels. Pioglitazone will also be subsidised for some patients who use insulin, and for some patients in combination with metformin. The growth of Type 2 diabetes is a major health concern, and some patients need medicines in addition to significant life style changes. PHARMAC estimates spending will be around \$4 million per year on pioglitazone, within three years.

PHARMAC worked with Diabetes NZ to help people manage their diabetes with the development of new patient resources, including a flip chart for nurses to educate patients, and a logbook for patients to help them keep track of their treatment (below).

Patient information resources were developed in Te Reo Maori and Pacific Island languages.

Diabetes

by the graph. Both test strips and diabetes treatments (insulins and drugs such as pioglitazone) have similar expenditure levels.



■ Drug cost Diabetes Management Prescriptions Diabetes Prescriptions Diabetes Management the role of glucose in the body Staving well w Staying well with Type 2 diabetes ole of glucose in the body

Osteoporosis

& HRT





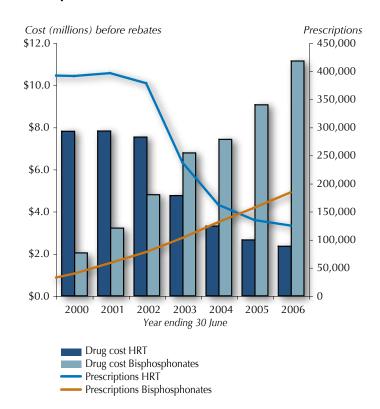


Access to alendronate (Fosamax) was widened for patients with osteoporosis, from 1 October 2005. The decision ensures it is available to patients at high risk of fractures (due to low bone mineral density), in addition to those who have already suffered fractures. Osteoporosis mainly affects women and older people, affecting at least 137,000 New Zealanders, including 30% of women older than 60 years and more than 50% of women older than 80 years. PHARMAC estimates 100,000 New Zealanders will qualify for the pharmaceutical; a significant increase on the 20,000 patients using it previously. New Zealand now has wider access to alendronate than Australia. The widened access will increase spending on alendronate to nearly \$17 million per year over the next three years.

PHARMAC also became a sponsor of Osteoporosis NZ You Deserve A Medal awards, which recognise people with osteoporosis who have taken steps to maintain active lives.

Meanwhile, the use of Hormone Replacement Therapy continues to decline. This continues a pattern established by the publication of international studies in 2002 linking long-term use of HRT with a number of health risks. Pharmac sponsored the Osteoporosis NZ You Deserve a Medal Awards. PHARMAC's CEO Wayne McNee (2nd left) is pictured with award winner Jenny Wilson of Auckland and Olympic rowing champions Georgina and Caroline Evers-Swindell.

Osteoporosis treatments and HRT







Antipsychotic medicines have been the single largest area of growth in the pharmaceutical budget, rising from \$4.9 million in 1998 to \$47.4 million last year, a ten-fold increase reflecting clinicians' preference for newer (atypical) antipsychotics over the older agents.

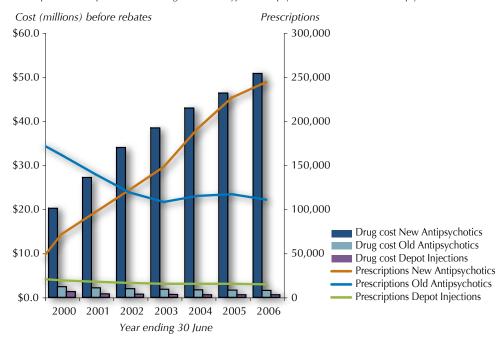
PHARMAC further increased the range of treatments for patients with mental illnesses, with the listing of an injectable form (Risperdal Consta) of the antipsychotic medicine risperidone. It's the first available long-acting injection of the new atypical antipsychotics, which enables targeted patients to receive their medication fortnightly, rather than taking tablets daily. This boosts compliance. PHARMAC also approved funding for risperidone in orally-disintegrating tablets (Risperdal Quicklets).

PHARMAC also worked with the College of Psychiatrists in running of a series of workshops throughout the country. These workshops provided a forum for discussing the College's newly-released guidelines on antipsychotics, and also provoked discussion on the prescribing practices of clinicians in different parts of the country. Feedback from psychiatrists, pharmacists and psychiatric nurses who attended the workshops was very positive.

General Practitioners can now prescribe the antidepressant venlafaxine (Efexor XR) for patients with severe depression; formerly it could only be prescribed by a psychiatrist (making it difficult for patients in more remote parts of New Zealand) so the decision to widen access will speed up access for patients.

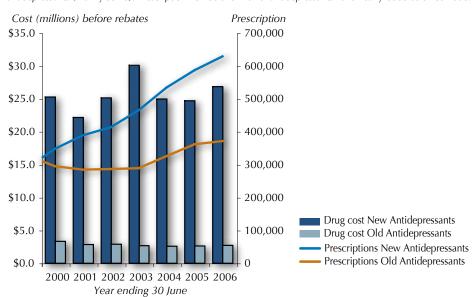
Antipsychotics

Prescriptions and expenditure for new generation (atypical) antipsychotics continue to rise steeply.



Antidepressants

Prescribing of all antidepressants continues to rise, mainly driven by a steep increase in the use of newer antidepressants (mainly SSRIs). Prescription numbers for newer antidepressants have nearly doubled since 2000.



PHARMAC in the wider

health sector

During 2005–06 PHARMAC continued to expand its purchasing role for DHB hospitals.

Influenza vaccine

For the second year PHARMAC undertook national purchasing arrangements for the subsidised influenza vaccine campaign. There was a record response, with 761,150 doses distributed to clinics over the four month publicly-funded campaign. This was a 6% increase on the 2005 season which, in itself, was a record result.

Widespread media reports about avian or 'bird' 'flu led to increased awareness of the risks of influenza in general, which may have contributed to the increased numbers of people deciding to be vaccinated.

New projects

DHBs have asked PHARMAC to help manage their spending on pharmaceuticals and related products with the possibility of making savings, in particular for products not previously the subject of national contracts. In 2004-05 PHARMAC made its first venture into this area, leading to a \$30m-plus saving on recombinant blood products for haemophilia.

In 2005/06 two new business areas were developed:

Bulk intravenous fluids

These are substances such as saline solutions, usually administered through intravenous drips, which prevent hospital patients dehydrating. A national contract for bulk IV fluids is expected to produce national savings of \$1.3 million over five years.

Radiological contrast media

These substances are administered to people undergoing X-ray procedures such as CT and MRI scans, to aid the procedure. PHARMAC commenced negotiation of national contracts for radiological contrast media and expects to conclude negotiations in the 2007 financial year.

Future work

The proven fiscal benefits of national agreements led to DHBs asking PHARMAC to look at other products in 2006/07; these will include:

- Antidotes and anti-venoms
 - to treat poisonings
- Wound care including surgical dressings and irrigation fluids (for cleaning wounds)
- Stents surgical implants used in cardiac surgery

Pharmaceutical cancer treatments

PHARMAC has been asked to assume management of spending by DHB hospitals on cancer drugs, to ensure nationally-consistent access to new pharmaceutical cancer treatments, and to help streamline the process for adding products to the cancer treatments 'basket'. PHARMAC has begun collecting data from DHB hospitals and reviewed the cancer treatments basket with expert advice from a committee of oncologists. This is a key step towards PHARMAC assuming the hospital cancer drugs budget from July 2007.

Exceptional Circumstances

PHARMAC administers the Exceptional Circumstances programme which enables patients who have rare or unusual diseases to access drugs not otherwise subsidised. Access is subject to approval by panels of clinicians, and operates within a sub-set of the pharmaceutical budget. Separate schemes are operated for community (CEC) and hospital (HEC) medicines.

Community Exceptional Circumstances (CEC)

The CEC panel had 26 teleconferences during the period July 2005-June 2006. In the year to June 2006 there were 956 applications under CEC, of which 617 were new applications and the remaining 339 were renewals. Approvals are generally given for a year. Overall, 49% of initial and 95% of renewal applications were approved. CEC expenditure was within budget at \$2.4 million.

Hospital Exceptional Circumstances (HEC)

HEC has been running since July 2003. This is the mechanism that enables DHB hospitals to fund medicines in the community that are not funded through the Pharmaceutical Schedule. The sole criterion for approval under HEC is that funding the medicine by the DHB hospital is more cost effective for the hospital than the most likely alternative intervention or outcome.

This year HEC processed 1,146 Panel applications. Of these 933 were new applications and 213 were renewals. 77% of initial and 91% of renewal applications were approved over the year. In addition, 824 applications for clopidogrel for drug eluting stents were approved without reference to the HEC Panel.

Hearing from the experts

PHARMAC's Advisory Committees

Advisory committees are a vital resource for PHARMAC and their advice and recommendations are the foundation upon which decisions are built. Here, members of the Consumer Advisory Committee, and a new member of PTAC's cardiovascular sub-committee, give their personal views on the roles and impacts of these advisory bodies.

Pharmacology and Therapeutics Advisory Committee (PTAC)

PTAC is a committee of doctors with expertise in pharmaceutical assessment, which can trace its history back to 1941. PTAC provides clinical advice to PHARMAC on applications to fund new pharmaceuticals and on proposals to change access to subsidised medicines. It is a committee of 10 practising doctors, which can ask for advice from its 15 sub-committees - a resource of over 70 health professionals feeding into PHARMAC's decision-making framework. PTAC members are often nominated by professional bodies, and are appointed by the Director-General of

PTAC is chaired by Wellington professor of medicine Carl Burgess. In 2005/06 PTAC's increasing work load, due to the number of new medicines listed and revisions to patient access, has meant its quarterly meetings now span two days, rather than one.

PTAC considered the cancer drug trastuzumab (Herceptin) twice, initially before Medsafe approved it.

The ongoing review of the membership of subcommittees continued, with a number of changes to the membership of subcommittees. A new sub-committee was formed to provide advice on the national contracting for dialysis fluids.

During the year Dr Anthony Ruakere was replaced by Dr Jim Vause, whose appointment ensures PTAC continues to receive clinical advice from a Maori perspective.



Making a arem

Dr Malcolm Abernethy, a Wellington-based interventional cardiologist, is one of the newest additions to PTAC's subcommittees - so far he hasn't even attended his first meeting. Malcolm doesn't consider it a case of poacher turned gamekeeper; instead he hopes his contribution will help all New Zealand's heart patients.

Initially, because Malcolm was nominated by the Cardiac Society, he assumed he was their official representative; now he understands a totally independent opinion is required. So, right from the start, it's a bit different to what he'd expected.

"I certainly want to make a difference; that's why I joined. I've got some strong views, and I've got a few issues I'd like PHARMAC to address - such as the two year prescribing limit, when most patients will take cardiac drugs for the rest of their lives. I favour evergreen prescriptions for drugs like statins. As a cardiologist, I know the impact of heart drugs on patients' quality of life, reducing future events which then postpones their chance of death... and that's why I decided to join the PTAC cardiology subcommittee, so I can help New Zealanders help themselves.

"People do have to accept personal responsibility; it's not all up to the health system. Everyone has to make the right lifestyle choices, and comply with any medication prescribed by their doctor. Pills are prescribed for a reason, and won't help anyone if they just sit in the cupboard."

His advice to all New Zealanders? Stop smoking; exercise daily; and eat healthily.

Dr Malcolm Abernethy MBChB (Otago), FRACP, FCSANZ practices privately at the Wakefield Heart Centre, works on a public health cardiology contract in Palmerston North and runs a pro bono clinic for the homeless in Wellington.

Consumer Advisory



"CAC has achieved a better concerns by PHARMAC staff. PHARMAC now seeks and Diabetes Care and One Heart Many Lives by PHARMAC, I launches enabled me to adapt

Federation, Blenheim

CAC provides PHARMAC with advice from a health consumer or patient perspective. The committee has nine members from a range of backgrounds, bringing diversity and a balance of views to the committee's deliberations. The committee is chaired by Auckland Regional Councillor and health consumers' advocate Sandra Coney.

CAC members have become increasingly involved in PHARMAC's interactions with the public through Demand Side campaigns, providing a more hands-on approach to PHARMAC activities. Members also attended a health consumers' forum in November 2005.

CAC was consulted on a number of PHARMAC work streams, including the examination of PHARMAC's structure for reviewing high cost medicines and PHARMAC's framework for undertaking economic assessments of pharmaceuticals (the Prescription for Pharmacoeconomic Analysis). This involved members providing advice as a committee and, in some cases, as individuals with specific expertise.

Membership of the committee continued to be stable, with no changes.

Issues covered by the committee in 2005/06 included:

- The prescribing of SSRI antidepressants;
- · Prescribing patterns for statins; and
- Initiatives to assist PHARMAC with its consultation database.

health funders make decisions the CAC, I believe PHARMAC, despite intense pressure from

Consumer Advisory Committee

oranga pai.

Greetings to you all. I offered myself as a member of the Consumer Maori voice. My wish is to achieve good health for everyone no

Waikato University

A personal

from CAC Chair **Sandra Conev**

The Consumer Advisory Committee's nine members represent diverse constituencies, including mental health, consumer rights, and the health of Maori, Pacific Island peoples, older people, women, families, and rural communities. This has brought a wide range of views to the committee's discussions.

The group has changed little since 2002, which demonstrates members' commitment. They are all busy, seasoned, health advocates, with little appetite for being on a committee simply for the sake of it. Committee members think their task worthwhile and that they are making a difference.

The committee has become increasingly involved when PHARMAC gets out into the community, and it has provided a valuable conduit for issues to be brought back to the committee.

As chair, I have valued PHARMAC's willingness to take on board the committee's recommendations and to discuss matters we raise. The committee is a pleasure to work with: members bring great collective wisdom to our meetings and always look for practical actions to take us forward.

"I was asked to apply by Zealand and Mental Health. respectful and promotes solutions that lead to a life that impact upon the networked people, who that it takes individuals and organisations to effect

Vicki Burnett, mental health

Staff in





Adam McRae is part of PHARMAC's Demand Side team, promoting the responsible use of medicines. After graduating from Auckland University with a Bachelor of Commerce, he volunteered as an emergency ambulance officer - the first sign of his move into health care. He returned to university for his nursing degree, and then worked with the Order of St John as an ambulance officer. Adam loves his role at PHARMAC, focusing on patient needs. As a nurse, he learnt that people are often unaware of how to manage their illnesses, so he finds it rewarding to be developing resources that can be a real help.

As a former Aucklander, Adam's brave enough to admit he's fallen in love with the capital city - its art galleries, theatre and restaurants; although that doesn't leave him much time for his love of automobiles, as tinkering with car engines at the weekend now competes with the latest offerings in Wellington's live theatre.

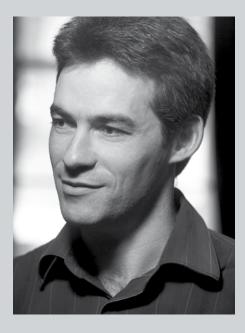
"PHARMAC has an outstanding team which routinely demonstrates its dedication to what can, at times, be a very difficult job"

Richard Waddel, PHARMAC Board chairman



Linda Wellington worked as a retail pharmacist before joining PHARMAC as one of its two Pharmaceutical Schedule analysts. She enjoys being at the front end of New Zealand's pharmaceutical purchasing, and manning the PHARMAC helpline, "because people appreciate getting answers to sometimes complex questions." She's always been interested in the complementary roles of health and science, which led to a postgraduate diploma in community nutrition. Linda's a vegetarian, but certainly not a foodie: "I only cook because I have to feed my family." She's married to a security specialist (electronic swipe cards, not spies), with three children aged from 9-15 years - all at different schools, so she appreciates PHARMAC's flexibility over her part-time role. Linda loves the outdoors (camping, tramping and running) and has instituted a book club at PHARMAC, focusing on themes like New Zealand writers.

Stephen Woodruffe joined PHARMAC a year ago after working at Palmerston North hospital as a radiation therapist; he's an intern Therapeutic Group Manager at PHARMAC, primarily responsible for cardiovascular, blood, dermatology and smoking cessation. He loves the analysis and negotiation elements of his role at PHARMAC, but still misses the daily personal contact with patients - a major attraction of radio therapy. Stephen, who's about to become a first-time father, spends his leisure hours house-hunting with his wife although accepts it's hard to find the right house in Wellington - he grew up on a farm, so still hankers after open spaces. And his active sports days are over, due to rugby injuries, but he's happy to watch any sport for hours.





Mary Chesterfield grew up in Guernsey and has always worked in the health sector. She moved here after meeting her New Zealand husband in Israel. She joined PHARMAC six years ago and is now responsible for co-ordinating pharmaceutical distribution to patients on high-cost medicines such as Glivec and beta-interferon. Her role demands highly-developed organisational skills and an empathetic approach. "Many of these patients are very sick, so they really appreciate having a personal face - sometimes they send me progress reports, or postcards. I really love being able to improve patients' quality of health; so I give it my all." Mary makes a point of calling new patients so they develop a full understanding of the delivery system. At the weekends, she teaches at a Sunday school, but she loves making her own clothes and planning interesting trips around New Zealand.



The PHARMAC Board

Chairman

Richard Waddel BCom, FCA;

Directors

Professor Gregor Coster MSc, MBChB, FRNZCGP Adrienne von Tunzelmann MA (Hons), Master of Public Policy

Karen Guilliland RM, RGON, MA, MNZM Helmut Modlik BCA, MBA

David Moore Mcom, Dip Health Ec, CA

Pharmacology and Therapeutics Advisory Committee (PTAC)

Chair

Prof. Carl Burgess MBchB, MD, MRCP (UK), FRACP, FRCP, physician / clinical pharmacologist

Deputy Chair

Dr Paul Tomlinson BSc, MBChB, MD, MRCP, FRACP, paediatrician

Committee Members

Dr Ian Hosford MBChB, FRANZCP, psychiatrist

Dr Sisira Jayathissa MBBS, MD, MRCP (UK), FRCP (Edin), FRACP, FAFPHM, Dip Clin Epi, Dip OHP, Dip HSM, MBS, physician

Dr Peter Jones BMedSci, MB, ChB, PhD, MRCP (UK), FRACP, physician

Dr Jim Lello BHB, MBChB, DCH, FRNZCGP, general

Dr Peter Pillans MBBCh, MD, FCP, FRACP, physician / clinical pharmacologist

Dr Anthony Ruakere MBChB, Dip Obst, Dip General Practice, FRNZCGP, general practitioner (resigned)

Dr Tom Thompson MBChB, FRACP, physician

Dr Jim Vause MBChB, DipGP, FRNZCGP, general practitioner (appointed)

Dr Howard Wilson BSc, PhD, MB, BS, Dip Obst, FRMZCGP, FRACGP, general practitioner

PTAC Subcommittees

Analgesic - Dr Howard Wilson (Chair, General Practitioner, PTAC member), Dr Peter Jones (Physician, PTAC member), Dr Rick Acland (Anaesthetist), Dr Jonathan Adler (Palliative Care Specialist), Dr Bruce Foggo (Palliative Care Specialist), Dr Lindsay Haas (Neurologist), Dr Geoff Robinson (Physician), Dr Jane Thomas (Paediatric Anaesthetist),

Anti-infective - Dr Paul Tomlinson (Chair, Paediatrician, PTAC member), Dr Steve Chambers (Infectious Disease Specialist), Dr Iain Loan (General Practitioner), Dr Richard Meech (Infectious Disease Specialist), Dr Mark Thomas (Infectious Disease Specialist), Dr Howard Wilson (General Practitioner, PTAC member).

Cardiovascular - Prof. Carl Burgess (Chair, physician/ clinical pharmacologist, PTAC Chair), Dr Sisira Jayathissa (Physician, PTAC member), Dr Malcolm Abernathy (Cardiologist), Dr Lannes Johnson (General Practitioner), Dr Stewart Mann (Cardiologist), Dr Richard Medlicott (General Practitioner), Dr Miles Williams (Cardiologist).

Cancer Treatments (CATSoP) - Prof Carl Burgess (Chair, Internal Medicine Physician, PTAC Chair), Dr Bernie Fitzharris (Oncologist), Dr Peter Ganly (Haematologist), Dr Vernon Harvey (Oncologist), Dr Tim Hawkins (Haematologist), Dr Andrew Macann (Radiation Oncologist), Dr Anne MacLennan (Palliative Care Specialist), Dr Anne O'Donnell (Oncologist), Dr Lochie Teague (Paediatric Haematologist/Oncologist).

Diabetes - Dr Paul Tomlinson (Chair, Paediatrician, PTAC member), Ms Pat Carlton (Diabetes Nurse Specialist), Dr Nic Crook (Endocrinologist), Dr Tim Kenealy (General Practitioner), Dr Peter Moore (Physician), Dr Bruce Small (General Practitioner), Dr Tom Thompson (General Practitioner, PTAC member).

Dialysis Fluids - Dr Sisira Jayathissa (Chair, Physician, PTAC member) Mr Neil Aitcheson (Materials Manager), Dr John Collins (Nephrologist), Ms Noreen McCullam (Dialysis Centre Nurse), Dr Krishan Madham (Nephrologist), Ms Karin Norman (Dialysis Centre Nurse), Assoc. Prof. Johan Rosman (Renal Physician).

Hormone and Contraceptive - Dr Howard Wilson (Chair, General Practitioner, PTAC member), Dr Mike Croxson (Endocrinologist), Prof John Hutton (Endocrinologist), Dr Frances McClure (General Practitioner), Dr Christine Roke (Family Planning Specialist), Dr Bruce Small (General Practitioner).

Mental Health - Prof Carl Burgess (Chair, Internal Medicine Physician, PTAC Chair), Dr Ian Hosford (Psychiatrist, PTAC member), Dr Crawford Duncan (Psychiatrist), Dr Jan Holmes (General Practitioner), Dr Verity Humberstone (Psychiatrist), Prof Richard Porter (Psychiatrist), Prof John Werry (Psychiatrist).

Neurological - Dr Tom Thompson (Chair, General Practitioner, PTAC member), Dr Alistair Dunn (General Practitioner), Dr Lindsay Haas (Neurologist), Dr Ian Hosford (Psychiatrist, PTAC member), Dr William Wallis (Neurologist)

Ophthalmology - Dr Tom Thompson (Chair, General Practitioner, PTAC member), Dr Neil Aburn (Ophthalmologist), Dr Rose Dodd (General Practitioner), Dr Steve Guest (Vitreo Retinal Surgeon), Dr Allan Simpson (Ophthalmologist).

Osteoporosis - Dr Peter Jones (Chair, Physician, PTAC member), Dr Anna Fenton (Endocrinologist), Prof Geoff Horne (Orthopaedic Surgeon), Dr Bev Lawton (General Practitioner), Prof Ian Reid (Endocrinologist), Dr Liz Spellacy (Geriatrician).

Respiratory - Dr Jim Lello (Chair, General Practitioner, PTAC member), Prof Carl Burgess (Internal Medicine Physician, PTAC Chair), Dr John Kolbe (Respiratory Physician), Dr Ian Shaw (Paediatrician), Dr Simon Wynn-Thomas (General Practitioner), Dr John McLachlan (Respiratory Physician).

Special Foods - Dr Paul Tomlinson (Chair, Paediatrician, PTAC member), Dr Simon Chin (Paediatric Gastroenterologist), Ms Kerry McIlroy (Dietician), Ms Jo Stewart (Dietician), Ms Moira Styles (Dietician), Dr John Wyeth (Gastroenterologist).

Tender Medical - Dr Paul Tomlinson (Chair, Paediatrician, PTAC member), Dr Jim Lello (General Practitioner), Dr Tom Thompson (General Practitioner), Sarah Fitt (Pharmacist), Dr Grant Howard (Intensive Care Specialist), Mr Geoff Savell (Pharmacist), Ms Andrea Shirtcliffe (Pharmacist), Dr David Simpson (Haematologist).

Transplant Immunosuppressant - Dr Paul Tomlinson (Chair, Paediatrician, PTAC member), Dr Peter Pillans (Clinical Pharmacologist, PTAC member), Dr Peter Ganly (Haematologist), Dr Peter Ruygrok (Cardiologist), Dr Richard Robson (Physician), Dr Kenneth Whyte (Physician), Dr Stephen Munn (surgeon).

Consumer Advisory Committee (CAC)

Chair

Sandra Coney (women's health advocate, Auckland), Chair

Committee Members

Vicki Burnett (Mental Health consultant, Auckland)

Sharron Cole (National Trainer, Parents Centres, Wellington)

Matiu Dickson (Te Runanga o Kirikiriroa Chairman. Hamilton)

Dennis Paget (Grey Power, Blenheim)

Paul Stanley (Chief Executive, Ngaiterangi iwi Tauranga)

Kuresa Tiumalu-Faleseuga (social services consultant, Levin)

Te Aniwa Tutara (Maori Health Manager, Waitemata

Heather Thomson (health manager, Te Aroha, eastern Bay of Plenty).

Hospital Pharmaceuticals Advisory Committee (HPAC)

Chair

Ian Winwood (Clinical co-ordinator of Pharmacy Services, Southland)

Committee members

Sarah Fitt (Pharmacy manager, Auckland DHB)

Neil Aitcheson (Materials Manager, MidCentral DHB)

Paul Barrett (Pharmacy Services Manager, Canterbury

Richard Bridge (Pharmacy Manager, Hutt Valley DHB)

Jan Goddard (Manager, Pharmacy Services, Waikato

Victoria Seymour (Chief Pharmacist, Northland DHB)

Melissa Witbrock (Unit Manager, Pharmacy, Otago DHB)

Exceptional Circumstances Panel

Dr Howard Wilson (chair, general practitioner, pharmacologist), Dr Mel Brieseman (Medical Officer of Health, Christchurch) Dr Paul Tomlinson (paediatrician, Southland DHB), Dr David Waite (physician, Capital & Coast DHB), Dr Sharon Kletchko (general manager, Nelson Marlborough DHB), Dr Andrew Herbert (consultant gastroenterologist, MidCentral DHB)

Cystic Fibrosis Advisory Panel

Dr John Kolbe (respiratory physician), Dr Ian Shaw (paediatrician), Dr Richard Laing (respiratory physician), Dr Cass Byrnes (paediatrician)

Gaucher Treatment Panel

Dr Callum Wilson (metabolic consultant), Dr Ruth Spearing (consultant haematologist), Dr Clinton Pinto (musculoskeletal radiologist)

The PHARMAC Team

Chief Executive

Wayne McNee BPharm, MPS, PG Dip Clin Pharm (Dist) - on secondment to Department of Prime Minister and Cabinet

Acting Chief Executive

Matthew Brougham MSc (Hons), Dip. Health Econ. (Tromso) - Manager, Analysis and Assessment

Medical Director

Peter Moodie BSc, MBChB, FRNZCGP

Corporate

Peter Alsop - Manager Corporate & External Relations

Selina Anslow Dip Bus - Receptionist

Stephen Boxall - Creative Director

Simon England - Communications Manager

Jacquie Kean - Legal Counsel

Christina Newman - Office Manager & Executive Assistant to the CEO

Melanie Pemberton Fisher BA (Hons), HND (UK) Communications Advisor

Liz Skelley BCA CA - Finance Manager

Jasmin Teague - Receptionist

Medical Team

Dilky Rasiah MBChB, Dip Public Health, MRACMA - Deputy Medical Director

Hayley Bythell - PA to Medical Director & Team Assistant

Jayne Chaulk MSc (Hons) - Exceptional Circumstances Panel Coordinator

Mary Chesterfield PTecC (UK) - High Cost Pharmaceuticals Coordinator

Katie Harris BA – Hospital Exceptional Circumstances Panel Coordinator

Erin Murphy BSc, Dip Public Health - PTAC Secretary & Panel Coordinator

Jan Quin RCpN - Project Manager

Silvia Valsenti MBChB - Panel Coordinator

Funding and Procurement Team

Steffan Crausaz BPharm, MSc, MRPharmS - Manager, Funding & Procurement

Mike Bignall BCA, BSc - Tender Analyst

Andrew Davies BSc (Hons) - Procurement Initiatives

Andrea Dick BSc, BCom - Procurement Initiatives Manage

Sean Dougherty BCom (Hons) - Therapeutic Group Manager

Jackie Evans BSc (Hons), PhD - Therapeutic Group

Geraldine MacGibbon PhD - Therapeutic Group Manager

Jessica Nisbet - Funding & Procurement Assistant

Matthew Perkins BSc, BCom, PG Dip Com - Procurement Initiatives Manager

Tommy Wilkinson BPharm, MPS - Therapeutic Group Manager

Stephen Woodruffe BPhEd (Hons) BHealSc

- Therapeutic Group Manager Intern

Schedule Team

Linda Wellington Dip Pharm, MPS - Schedule Analyst Kaye Wilson Dip Tchg - Schedule Analyst

Demand Side Team

Marama Parore (Ngati Whatua, Ngati Kahu, Nga Puhi) - Acting Manager, Demand Side & Maori Health Manager

Rachel Mackay BA, NZIMR - Manager, Demand Side (on parental leave)

Karen Jacobs MBA, ADN - Demand Side Manager

Adam McRae BCom, BNurs - Demand Side Manager

Erina Rewi (Ngati Kahungunu, Rakiura Maori) - Project Manager, Maori Health

Analysis and Assessment Team

Rico Schoeler - Acting Manager, Analysis & Assessment

Jason Arnold BSc, PG Dip Stat (Dist) - Senior Analyst, Analysis & IT Support

Rachel Grocott BCom (Hons) - Senior Analyst, Hospital Pharmaceuticals Assessment

Scott Metcalfe MBChB, Dip Community Health, FAFPHM - Public Health Physician, Chief Advisor Population Medicine

Ginny Priest BSc (Hons), BCom - Analyst, Hospital Pharmaceuticals Assessment

IT Team

Geoff Lawn B Mus, PG Dip Comp Sci - Database Analyst

Peter Ericson - Database Analyst

John Geering BA, BSc - Information Manager

Publications available on PHARMAC's Website include:

- The Pharmaceutical Schedule and Monthly Updates
- PHARMAC's Operating Policies and Procedures (including minutes from meetings relating to the review of these)
- PHARMAC's Annual Report to Parliament
- Minutes of PTAC and CAC meetings
- PHARMAC's Statement of Intent
- Annual Reviews
- A Prescription for Pharmacoeconomic Analysis (an explanation of PHARMAC's methods for Cost-Utility Analysis)
- Consultation letters
- PHARMAC's invitation to suppliers to tender for sole supply of pharmaceuticals
- Media releases
- Special Authority Forms
- Patient leaflets
- Statistics about pharmaceutical spending in New Zealand

