Pharmaceutical Management Agency

Annual *Review* 2013

PHARMAC
Pharmaceutical Management Agency

Key figures:
Combined Pharmaceutical Budget

HOW THE COMBINED PHARMACEUTICAL BUDGET (CPB) WAS USED – JULY 2012-JUNE 2013.

PHARMAC MANAGES THE ANNUAL CPB, WHICH IS SET BY THE MINISTER OF HEALTH.

$783.6 million

TOTAL COMBINED PHARMACEUTICAL EXPENDITURE

52,398

NEW ZEALANDERS BENEFIT FROM NEW FUNDING DECISIONS

12

NUMBER OF V
INCLUDED WITH

20

NEW PHARMACEUTICALS LISTED

60

NEW INVESTMENTS IN PHARMACEUTICALS

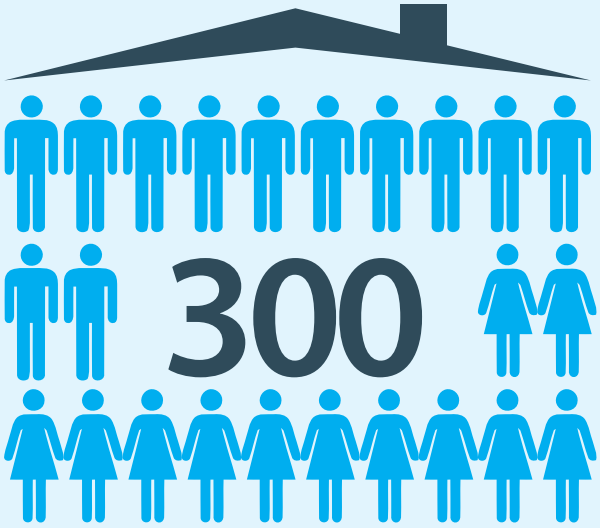
3.4 MILLION

NEW ZEALANDERS RECEIVED SUBSIDISED MEDICINES

Rx 42.2 MILLION

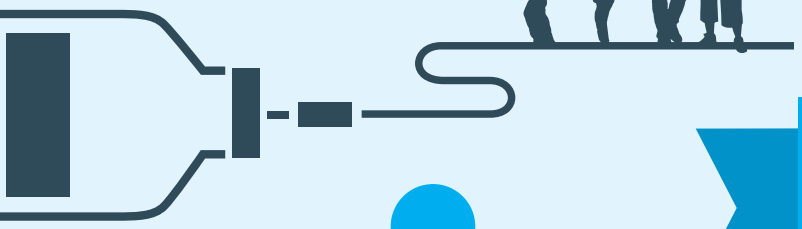
PRESCRIPTION ITEMS FUNDED

VACCINES
HIN THE CPB



300

PEOPLE ATTENDED OUR COMMUNITY FORUMS



Key figures: *Hospital Pharmaceuticals*

$56.5 MILLION

AMOUNT OF SAVINGS ACHIEVED

$4.1 million

FIRST FULL YEAR SAVINGS TO DHB HOSPITALS FROM ANNUAL TENDER

PHARMAC has had its ear to the ground in the past year, and is turning what it hears into positive action.

writes PHARMAC Board chairman Stuart McLauchlan

Listening, thinking, responding. These are central to good decision-making. In the past year PHARMAC has been doing plenty of all of these.

This approach is especially important now that PHARMAC is responsible for a larger proportion of District Health Board funding. In addition to medicines and medical devices used in the community and hospital cancer medicines, PHARMAC now manages the vaccines schedule and from 1 July 2013, all medicines funded in DHB hospitals. It's also begun a process to take on management of hospital medical devices.

Listening to the community

Partly because of this expanding work, we embarked on one of our largest consultation exercises in the past year – a review of all our Operating Policies and Procedures. This has included beginning consultation on one of the foundations of PHARMAC's work, our decision-making criteria. These are the factors PHARMAC takes into account every time it makes a pharmaceutical funding decision.

It had been six years since PHARMAC last reviewed these criteria, and we thought it was time we sought the views of the community. One of the questions to consider was, given that PHARMAC's role has recently expanded to include management of all hospital medicines, vaccines and hospital medical devices, whether there are different things we need to take into account or consider when making decisions on these different types of medical products.

During consultation we visited 12 New Zealand towns and cities to seek people's views at Community Forums. These attracted a broad mix of people with an interest in PHARMAC's work – pharmaceutical suppliers, patients and patient groups, community groups, clinical colleges and professional associations, health ethicists and economists, prescibers and pharmacists. In all, more than 300 people attended the Forums.

People are clearly very interested in what PHARMAC does, which is understandable. PHARMAC's work touches nearly every New Zealander in some way or another. From the feedback we received, people welcomed this opportunity to talk through a fundamental aspect of PHARMAC's role face to face, and many backed this up with a written submission as well.

That was the listening part. We're now in the process of thinking through all the submissions and information we've received, both in writing and through what people told us at the Community Forums. Our next step will be to put together a new set of draft decision criteria, and seek further input from the community. That's likely to happen in early 2014.

Listening to clinicians

We've also been listening to what clinicians have been telling us as we have gone about constructing the first nationally consistent list of hospital medicines (the Hospital Medicines List or HML).

This was a process that involved much information-gathering from DHB hospitals about what products they were using, then consulting with clinicians about draft lists. We wanted to be as inclusive and responsive as possible, recognising that there could be different practices between different districts or hospitals.

Then once we had the final list, we ensured clinicians had some flexibility in how it was used. This was a notable step, and welcomed by our Consumer Advisory Committee as putting clinical practice ahead of bureaucracy. As our consumer group noted, this isn't always the approach taken when new rules come into play.

Obtaining clinical input into our hospital medical devices decision-making was a key consultation from November 2012, with further consultation planned in 2013 and 2014 on the policies and procedures we will require for successful management of hospital medical devices.

Listening to our experts

The national immunisation schedule became PHARMAC's responsibility from 1 July 2012. Coincidentally New Zealand has been in the grip of a pertussis (whooping cough) outbreak, and one of the first questions put to our new immunisation subcommittee was whether any steps could be taken to provide further protection to the most vulnerable people – young children.

The response, from the beginning of 2013, was to fund pertussis immunisation for women from week 28 of pregnancy.

This addition to the funding criteria recognised that immunity could be passed to newborn babies and provide additional protection during the outbreak.

PHARMAC also moved to broaden funded access to influenza vaccine, so it could be funded for children under the age of five years with significant respiratory illness.

These actions demonstrated PHARMAC's ability to respond rapidly when additional vaccine coverage was seen to be desirable, and recommended by our clinical experts. It's an approach that is likely to continue under PHARMAC's management of vaccines.

Listening to the needs of patients

One of our largest pieces of work in the past year has been implementing our decision to change the funded brand of blood glucose meters for diabetes. This was a decision affecting more than 100,000 people, so we knew a lot would have to be done to support the decision.

PHARMAC made changes to its original proposal in response to feedback. This included funding a higher-spec meter than originally proposed, and creating special criteria so some people could continue to use their existing meters.

We also heard that people wanted to see a comprehensive patient support programme to enable them to transition to the new CareSens meters, so that's what we did. This involved providing information for prescribers, pharmacists and diabetes nurses, and patients; running more than 70 Meet Your Meter events to give people an additional opportunity to learn about the meters, and providing targeted assistance where required.

This has been one of PHARMAC's largest decision implementations, and in all, more than 110,000 people have now moved to the new meters. As a result of this change, PHARMAC is saving District Health Boards $10 million per year, every year. This is important, because it frees up funding previously locked into diabetes management products, that can now be used to fund other healthcare while maintaining access to the same standard of diabetes management products as before.

This is a fundamental benefit of the PHARMAC approach – recycling funding through generating savings, then reinvesting the funding in new pharmaceuticals or health services. Last year PHARMAC again grew the range of funded medicines – adding 20 new pharmaceuticals during the year and widening access to a further 40. In the community, about 3.4 million New Zealanders now receive funded medicines each year, while spending is managed on budget.

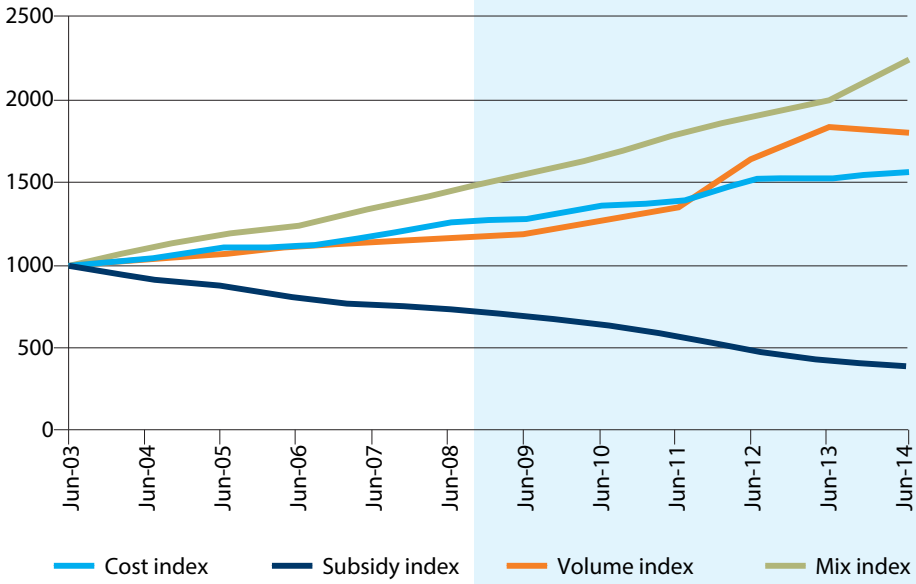
Pharmaceutical price, volume and mix

PHARMAC managed combined pharmaceutical funding on budget at $783.6 million in 2012/13, with PHARMAC contributing a further $2.06 million from its Discretionary Pharmaceutical Fund. Overall spending grew by $6.2 million, which included funding for community pharmaceuticals, pharmaceutical cancer treatments and vaccines.

The number of prescriptions funded grew to 42.2 million, an increase of 2.7%, with some 3.4 million patients receiving funded medicines. PHARMAC estimates that 52,398 additional patients will benefit from PHARMAC's decisions implemented over the past 12 months.

The graph on this page is an index that shows the price, volume and mix of medicines over 20 years. While price, volume (the number of medicines prescribed) and mix (the various types of medicines funded) all climb, the subsidy index (actual price paid) has declined in real terms. This demonstrates that the increased access to medicines has been achieved through reducing medicine subsidies, rather than by restricting access to medicines. That's provided benefits for PHARMAC and the wider sector. In other words, PHARMAC is getting more medicines, for less.

Price volume, mix



Getting more for less:

The index shows that, in real terms while price, volume and mix of pharmaceuticals are growing, the cost to taxpayers (subsidy) is reducing.

PHARMAC's approach to funding pharmaceuticals is as relevant now as it has ever been – perhaps even more so

writes Chief Executive Steffan Crausaz

Take a range of products that do much the same thing. Compare features and prices. Look for the best combination of features and value for money. Ask suppliers for the best deal. And if you find something cheaper that does the job just as well, buy it instead.

This is pretty much what people do every time they go shopping, and makes good sense. After all, we all want our money to go as far as possible.

In a nutshell this is how PHARMAC has negotiated national pharmaceutical contracts back as far as 1993. We look at what is available, we ask questions and seek advice on the evidence to support each option, we look at what other opportunities are available, any implementation consideration, then make a choice about which supplier to go with. If competition is available (generic medicines), we use commercial processes such as our annual tender to get best value.

It's an approach that has served us well, and is recognised as effective. Since 1993, New Zealanders' access to funded medicines has improved markedly, and spending has kept within a budget that is affordable.

It's not just our own data that supports us getting `more for less'. A report this year by Australia's Grattan Institute looked at the different pharmaceutical funding systems in Australia and New Zealand. The report found that adopting a New Zealand-style system for off-patent drugs could have huge benefits for Australia. Looking just at the cholesterol-lowering drug atorvastatin, the report said:

> "One drug alone, atorvastatin, costs the Australian Government and individual patients more than $700 million a year. In its 40 mg form, the [Australian Pharmaceutical Benefits Scheme] pays more than $51 for a box of 30 tablets. New Zealand pays AU $5.80 for a box of 90 tablets. Adopting New Zealand prices for atorvastatin would save the PBS more than $1.4 million a day. Patients who pay full co-payments would save $22 on each box of tablets."[1]

Recognition

PHARMAC has taken a textbook critical appraisal model and applied it to funding medicines and community medical devices in New Zealand. It is heavily reliant on good quality clinical evidence, which underpins both the economic analysis and clinical advice PHARMAC receives.

PHARMAC's approach has been highlighted in a recent report by the Prime Minister's chief science adviser Sir Peter Gluckman[2].

In his report, Sir Peter says:

> "PHARMAC is perhaps the best known agency with a rigorous approach to evidence evaluation, and it is interesting to note the high public and professional acceptance of the model despite the fact that it must deal with highly contentious issues. PHARMAC's obvious use of science in decision making has fostered its public credibility and, in turn, the acceptance of the difficult decisions it has to make about which medicines are funded by the public health system."

It's a notable observation that PHARMAC's consistent and methodical approach to the use of evidence is one of the factors underpinning its success. As Sir Peter notes, over time this has fostered acceptance and trust in PHARMAC's work. People don't always agree with us, but they do recognise the rationale behind the decisions we make. In turn, this has paved the way for PHARMAC to take on the wider role now entrusted to it by Government.

Sharper focus

Now that PHARMAC is taking on a wider role, with vaccines, hospital medicines, and moving into hospital medical devices, the relevance of the PHARMAC approach comes even more sharply into focus.

Because while the combined Pharmaceutical Budget is now $795 million, by 2020 with the inclusion of hospital medicines funding and hospital medical

[1] *http://grattan.edu.au/publications/reports/post/australias-bad-drug-deal/*

[2] *The role of evidence in policy formation and implementation; a report from the Prime Minister's Chief Science Advisor. Available at http://www.pmcsa.org.nz/wp-content/uploads/The-role-of-evidence-in-policy-formation-and-implementation-report.pdf.*

devices funding, the amount of funds under PHARMAC's management is likely to rise to about $2 billion.

One of the characteristics of the PHARMAC approach we want to preserve is the ability to respond quickly to current issues. An example in the past year was our new role in managing vaccines. The national immunisation schedule was added to the Pharmaceutical Schedule in July 2012.

Vaccines

Vaccines are a comparatively small group of products, but vitally important to the health of New Zealanders. Under PHARMAC's management vaccines undergo the same rigorous assessment as medicines seeking funding, while PHARMAC can also respond nimbly to requests for change. Using this approach, PHARMAC provided additional protection from pertussis (whooping cough) and influenza infection for vulnerable people in early 2013.

While there is only a handful of vaccines, hospital medicines number more than 2000, and account for about $200 million of District Health Board spending each year.

Hospital medicines

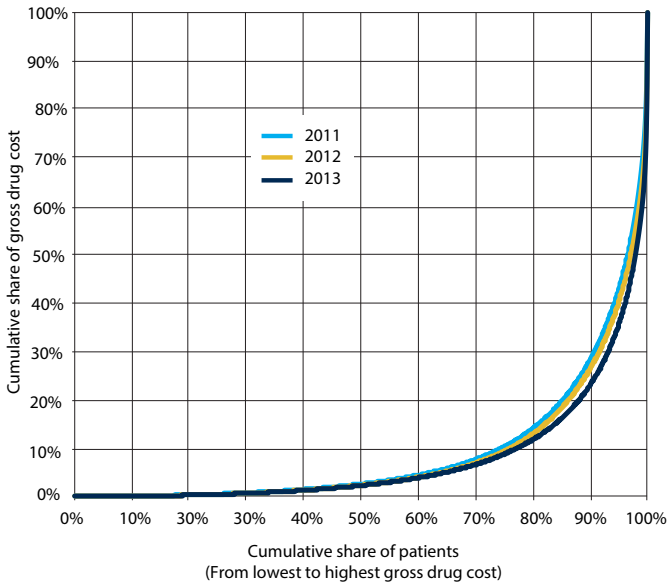
During the past year we put the finishing touches on constructing the first national Hospital Medicines List (HML). Our objective was to build a list of medicines that reflected current practice, enabled clinicians and patients to have the medicines they need, and enabled nationally consistent access.

The HML came into effect on 1 July 2013. Now decisions on which medicines are funded in hospitals are PHARMAC's responsibility. It's a responsibility we take very seriously, because we know hospital clinicians rely heavily on these medicines to be able to do their job. We want to help, not hinder.

An even larger piece of work is now underway, involving hospital medical devices. While medicines number in the thousands, devices number in the tens of thousands. This poses a challenge to PHARMAC – and not just because of the numbers involved. Medical devices don't have to go through the same rigorous clinical trials and regulatory process as medicines, and so the evidence base for their use is not always there. Nevertheless, just like medicines these devices are heavily relied on by health professionals at the front line.

How PHARMAC adjusts and adapts its policies and procedures will be critical to our success in medical devices. We want to hold onto the strengths that are at the heart of our success, but be adaptable to recognise that, when it comes to hospital medical devices, the same approach won't be right for everything. We have already begun some interim procurement work and expect to see benefits from this in 2014.

Gross drug cost distribution



85% of pharmaceutical spending goes on just 16% of patients.

Small group, big impact

A comparatively small group of pharmaceuticals has a very large impact on pharmaceutical spending.

Our analysis of the prescribing data shows that 85% of pharmaceutical spending goes on just 16% of patients. That equates to $665 million spent on 540,000 people.

Put another way, it means a comparatively large number of people – 2.7 million, are covered with just 15% of the budget. In other words PHARMAC gets enormous bang for the buck for the majority of New Zealanders in need of medicines.

About 12% of gross spending - $112 million – went on just four pharmaceuticals. Together these drugs were taken by nearly 6000 patients (0.18% of the total). These are the cancer and immunosuppressant drugs trastuzumab (Herceptin) and rituximab (Mabthera), and the TNF inhibitor rheumatology drugs adalimumab (Humira) and etanercept (Enbrel).

At the other end of the scale, very large numbers of people are taking medicines at comparatively low cost. For example, 269,500 patients were prescribed the cholesterol drug simvastatin last year at a cost of just $2.48 million.

What this shows is that PHARMAC is funding a small number of very expensive drugs, for very small numbers of patients, and that PHARMAC is routinely dealing with expensive drugs, most of which are funded through the Pharmaceutical Schedule. Of the 10 highest cost individuals, eight receive their expensive medicines listed on the Pharmaceutical Schedule, with just two being funded through the Named Patient Pharmaceutical Assessment policy.

The PHARMAC approach means that the savings we get from older, established drugs enables us to free up funding for these expensive new technologies.

Medical Director Dr Peter Moodie is leaving PHARMAC after 14 years.

He says improved communication and a consistent approach has led to greater acceptance of PHARMAC's role and decisions

Things have changed for the better around PHARMAC and people now have a greater understanding and acceptance of the role PHARMAC plays. That's probably the biggest change I have seen in my time as Medical Director.

In the late 1990s there was a lot of very emotional debate around some major changes with cardiac drugs. Before I joined PHARMAC there was the change to ACE Inhibitors, where PHARMAC took a number of funded products and reduced them to two, neither of which had significant market share. I was in general practice at the time, and our practice changed all our patients across. PHARMAC had explained it would save the country a lot of money and basically all ACE inhibitors had the same effect. They were prepared to say that publicly and to pay practices to make the changeover. I couldn't see what the fuss was about.

We also had the widening of access to statins through changing to a less expensive statin. Again the logic of the widening of access didn't seem to me to be a big issue. It seemed a very sensible way of getting through a problem of providing more people with access to a drug without needing a lot of money to do it.

When I took up the position of Medical Director in 1999, here I was this general practitioner coming into the job and suddenly I had professors of medicine, professors of cardiology on the phone to me. Suddenly I was the one having to explain these decisions. This was certainly a challenge.

I think clinicians in the early days were extremely suspicious of PHARMAC. The concept of rationing was not one clinicians were comfortable with. But I think one of the biggest things we've managed to do over the years is get more clinician buy-in. There's now greater recognition of, and respect for, each other's roles in delivering the best health outcomes for New Zealanders. Some clinicians saw PHARMAC as interfering in the way they could do their jobs and impacting on their clinical practice. That was certainly very testing in the early days.

Confidence

Of course there are still debates over aspects of our work, but by and large I think clinicians see PHARMAC as an organisation that takes care with decisions and has the right advice from clinicians. That has built confidence.

Initially it was cardiac drugs - ACE inhibitors and statins, calcium channel blockers and the great metoprolol debate. Then we had the rheumatology drugs and new generation cancer and auto-immune drugs.

I think the thing is that doctors, fundamentally, are scientists. If you can present a logical scientific argument they will listen. PHARMAC has been very consistent with the way it has used evidence – science – to explain decisions, and that has built a lot of confidence and acceptance over the years.

PHARMAC has improved its contacts database and the information that it can feed back. Our communication with clinicians has improved a lot. The more we feed back to clinicians, the more we will gain confidence in our decisions.

Attuned

People in general have become more attuned to change, and there's a greater acceptance of the need for change. In those early days people were fighting change because they couldn't see the reason for it, and that's understandable. Nowadays they are more relaxed. They have seen brand changes and the entry of generics, and more importantly, widening of the range of available medicines, and a lot of that early anxiety has gone. Something like paroxetine (for depression) has changed brand several times. But it's still the same medicine and people see that.

Acceptance

PHARMAC's basic approach hasn't changed – but it has become better at explaining its decisions. Even in the early days when we consulted on things we did listen very carefully. I recall one particular consultation around calcium channel blockers, we made every change to our proposal that the Cardiac Society suggested in their submission. We were listening much more than people gave us credit for, but that wasn't always seen.

The speed of change sometimes caught people off-guard. Clinicians were feeling sidelined because it was all happening so quickly, and the [medical] colleges were not geared up to respond to something we wanted to do in a short period of time. Colleges and Societies now are better geared up to respond to those sort of decisions quickly.

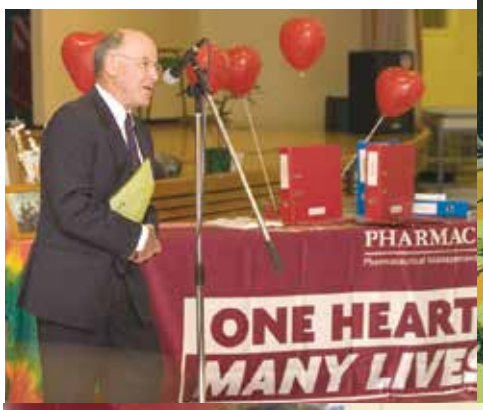
From my point of view the most satisfying thing I have seen is the acceptance by New Zealanders that PHARMAC as a Crown agent is there to do good. That has been a huge change in attitude, in the medical profession, the public, and by and large the media. I think the New Zealand media has been able to look at and understand rationing decisions better than the media in many other countries, and they have furthered the debate in a rational way much more than in many other countries.

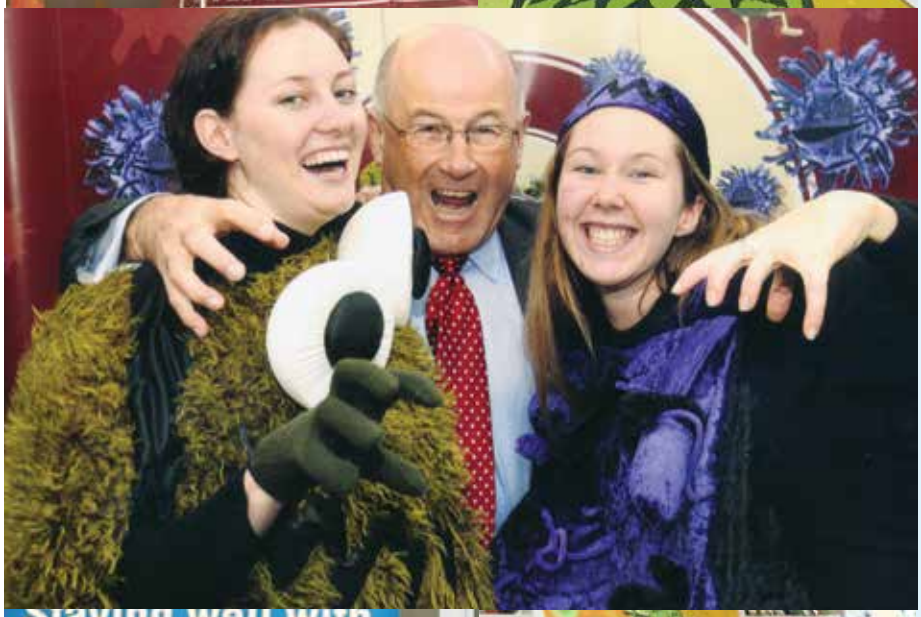
Growing

These days PHARMAC is growing and expanding, taking on new roles with vaccines, hospital medicines and medical devices. Looking back to 1999, I'm not sure people would have been quite so accepting of PHARMAC taking on new roles like hospital medical devices. If we had tried that 10 years ago there would just have been an uproar. Now we have the medical colleges coming to us saying, okay, you're doing this, we want to be involved and we'd be happy to help you, we just need to know what's going on. That's a huge change.

The other major shift has been moving from the concept of restricting by speciality to restricting by indication. Medicine has become much more complex and you have a lot more people doing sub-specialties. These people know a lot about what they're doing, so if you restrict prescribing subsidised medicines to a certain speciality, these people can be cut out. That doesn't happen to the same degree when you restrict prescribing by indication, so that has been a change for the better.

So now it's back to general practice. I have always kept my hand in, doing one day a week while also being PHARMAC's medical director. Now I am doing more and I am finding it refreshing. I'm certainly not retiring.





Decisions, decisions

• More than 300 people had their say as part of Community Forums PHARMAC hosted, as part of a review of our Decision Criteria

"Very well run. Created a good atmosphere making contribution easy for all. From the consumer's view I felt this was an event well worth attending."

"Feel like you did actually want to hear what we think - thanks for that."

"Well organised and plenty of time for discussion."

"Well facilitated so that everyone was able to give their views - respectful and inclusive process"

Whenever PHARMAC makes a pharmaceutical funding decision, it uses a set of criteria to make that decision. The Decision Criteria, published in PHARMAC's Operating Policies and Procedures, are fundamental to PHARMAC achieving its objective of securing the best health outcomes for New Zealanders from the available funding.

PHARMAC began a review of the Operating Policies and Procedures (OPP) in 2012. As part of this, we undertook a widespread community consultation exercise around the Decision Criteria in 2013.

The consultation included 12 community Forums throughout the country, which were attended by more than 300 people. In addition, we received about 130 written submissions and met face to face with groups including the Human Rights Commission, National Health Committee (NHC), Medical Technology Association of New Zealand (MTANZ), Medicines New Zealand, and the New Zealand Organisation for Rare Disorders (NZORD).

Judging by the feedback we received, people found the Community Forum exercise to be worthwhile. People told us they really appreciated the opportunity to engage with PHARMAC, and that the relatively informal setting was appreciated and enabled free and frank discussion.

Next steps

All the feedback we received through the consultation process – including the thoughts of people attending the Community Forums – are being taken into account before we head into the next phase of the development of our Decision Criteria. This will be a further round of consultation on a draft new set of criteria, which is likely to occur in early 2014.

"Thank you for giving the community the opportunity to comment and have input into PHARMAC."

NPPA – increase in applications, and rates of approval

• Benefits become apparent in the first year; applications and approvals rise, 14 medicines subject to multiple NPPA approvals moved to the Pharmaceutical Schedule

The Named Patient Pharmaceutical Assessment (NPPA) policy was introduced in March 2012, replacing the earlier Exceptional Circumstances schemes. The policy provides a mechanism for a patient's individual circumstances to be taken into account, if they are seeking funded access to a medicine that is not listed on the Pharmaceutical Schedule or not listed for their indication.

Since its introduction on 1 March 2012 until 30 June 2013 (first 16 months), we received 1512 NPPA applications. This was a 25% increase over the previous 16 month period of Exceptional Circumstances.

Of these NPPA applications, 972 (64%) were approved and 30 declined.

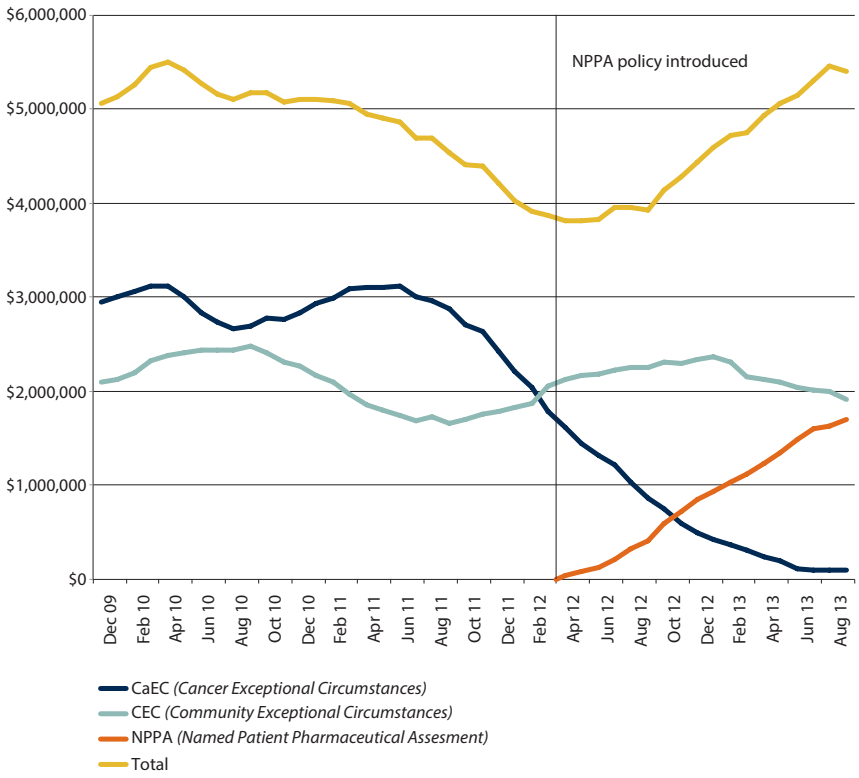
197 applications were withdrawn, mostly where another source of funding may have been available (for example through the Pharmaceutical Schedule or by the DHB hospital). 302 applications did not meet the pre-requisites so were not progressed for a final decision. For most of the applications that did not meet the pre-requisites, there were other funded alternative treatments available. In addition there were 74 renewal applications.

As well as an increasing number of applications and rate of approvals, the policy's intention to link more closely with the Pharmaceutical Schedule has come to fruition. Fourteen medicines that were the subject of multiple NPPA approvals were moved into the Pharmaceutical Schedule. These included benzbromarone for gout, pegaspargase for acute lymphoblastic leukaemia, protionamide for tuberculosis and paromomycin for cryptosporidium infection.

Listing these medicines on the Pharmaceutical Schedule provides more streamlined access for patients, greater certainty of access for patients and clinicians, and reduces administrative effort. While individually each of these medicines only account for a handful of NPPA approvals, collectively they represent considerable workloads both for treating doctors and for PHARMAC. From 1 July 2013, the NPPA policy was amended to enable applications for hospital medicines to be made.

The graph illustrates that expenditure on all exceptions policy programmes (including continued Exceptional Circumstances spending from historic approvals, and new NPPA approvals), is rising.

Spending on exceptions





PHARMAC has come a long way in how it responds to Māori health needs, but the journey is far from over as it embarks on a new ten year strategy

PHARMAC is one of many Government agencies that influence the health of New Zealanders. Our role in pharmaceutical assessment, funding, procurement for DHBs and promoting the optimal use of medicines, influence health and disability system outcomes both directly and indirectly.

As a Government agency PHARMAC has a commitment to upholding the principles of the Treaty of Waitangi. Our Māori Responsiveness Strategy – Te Whaioranga – provides a framework for ensuring that we respond to the particular needs of Māori in relation to medicines.

It's been 10 years since the first plan was developed and PHARMAC has now redeveloped a pathway for the next 10 years that aims to:

- advance tino rangatiratanga with whānau in health interventions
- establish and maintain authentic strategic connections
- champion evidence-based Māori medicine management
- support and engage in indigenous research and development about pharmaceutical management
- enhance and enable internal expertise and capability in te ao Māori.

While seen as a leader in developing targeted medicines programmes for Māori in the community, it has been a long journey for PHARMAC to get there.

At the turn of the 21st Century PHARMAC was still a young organisation operating as a limited liability company. It focussed on establishing the Pharmaceutical Schedule, managing the budget and getting systems in place. In 2001 District Health Boards were established, PHARMAC became a Crown entity and started thinking about its role in relation to the rest of the health sector, including in relation to Māori health.

It was known that Māori weren't getting access to medicines the same as everyone else, the question was what could be done about it. So PHARMAC took an evidence-based approach, commissioned some research and went to ask the community in a nationwide series of hui.

The result was a strategy that gave PHARMAC a plan around Māori health. PHARMAC was already doing quite a bit, but with the community's input, we were able to bring some structure and direction to it.

This was something PHARMAC had never done before. It was an exciting opportunity to get out to the community and hear what they had to say. This has contributed to the strategy's success, enabling buy-in across the organisation, and leadership support from the Board.

One of the big changes was thinking a bit differently around our focus on population health. We realised that one size didn't fit all, that there are some communities that need things to be done in different ways.

There have been a lot of big achievements. Supporting people involved in the PHARMAC structure, be it on staff, on the Board, or on advisory committees like PTAC and CAC, has made a huge difference. It's provided an authentic voice for Māori in PHARMAC. That voice, that advocacy and PHARMAC's values have helped us develop useful products for delivery into the community, like One Heart Many Lives and He Rongoa Pai, He Oranga Whānau. Our aim is to hand over our successful programmes, once proven, to those who are closer to the action in their communities, and develop new ones.

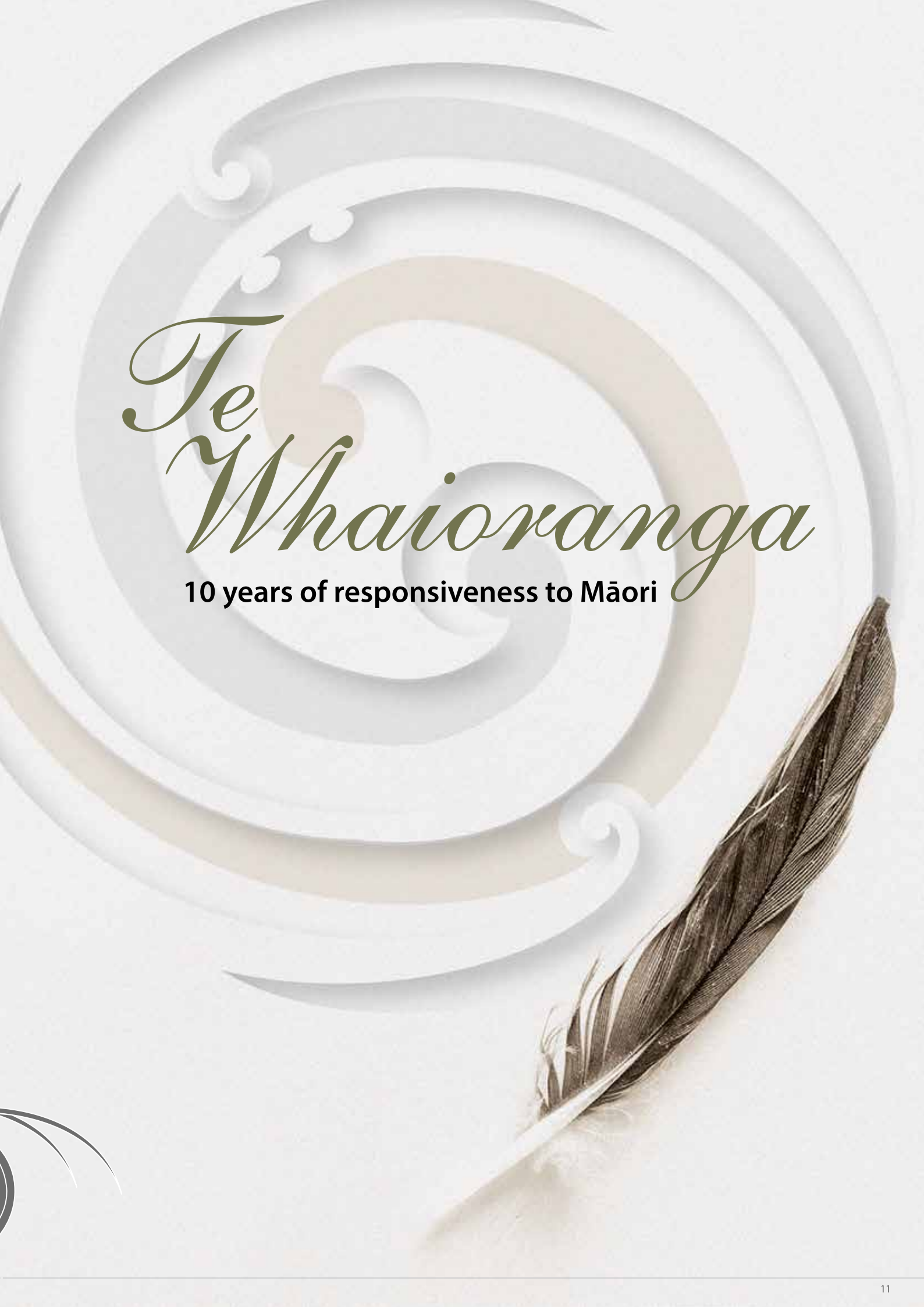
It's also been about little changes. Take the Hiwinui Heke scholarship for Māori pharmacy students. It's not a lot, but it's part of the answer. Through that scholarship we now have 18 alumni of future influencers. These are young Māori pharmacists that are emerging leaders. And we've built relationships, which are critical.

Because medicines are so essential to people being well, or preventing illness, it's really important that people know about us and what we do. Before this work, Māori were not clear on PHARMAC's relevance. Now they are, and that's a big change. We have come to be seen as a leader in developing Māori health solutions that work in communities.

The work is not done yet. Te Whaioranga will continue to guide PHARMAC as we address inequalities in medicines access and opportunities to improve use.

Te Whaioranga

10 years of responsiveness to Māori



The Hospital Medicines List
– nationally consistent access to hospital treatments

On 1 July 2013, Section H of the Pharmaceutical Schedule got a facelift and new status, with the Hospital Medicines List (now commonly known as the HML) being introduced for use by prescribers in all DHB hospitals.

The HML is the first nationally consistent list of hospital medicines and means DHB patients get access to the same pharmaceutical treatments, wherever they are being cared for in a New Zealand public hospital.

Developed by clinicians, pharmacists and PHARMAC over two and half years, and reflecting existing practices in most DHBs, the list is now the basis for all DHB hospital prescribing.

This means some patients are getting access to drugs not offered to them before.

For example, there had been varying availability of infliximab, a biologic agent, for use in treating inflammatory bowel disease (as well as other conditions), and also ranibizumab, a treatment for macular degeneration (a form of blindness). Both these medicines are now funded and available under the same criteria nationally.

This supports the Government's goal of equitable access to hospital medicines, regardless of where people live, and a consistent approach to the introduction of new pharmaceuticals in hospitals.

PHARMAC's role

To achieve consistency, the addition of new medicines or changes to the medicines being used in hospital are now managed through PHARMAC's application processes.

This means decisions on hospital treatments that will be funded are assessed against the PHARMAC Deci Criteria - as has been the case for hos cancer treatments for some time.

PHARMAC's Named Patient Pharmaceutical Assessment (NPPA) exceptions process is available for ca where a prescriber wishes to use a medicine not included in the HML for a particular patient. In consultation with the sector, during the final development stages of the list, PHARMAC also developed an updated NPPA policy and application process. These were also introduced on 1 July 2013.

The new policy included an allowance for hospitals to use local processes and panels to deal with clinical decisions on non-HML treatments that needed to be made in less than five working days. These 'rapid assessments' are to take into account the Decision Criteria and be reported to PHARMAC.

The HML is not static

The HML is being updated monthly, like the community listings, and printed editions sent to DHB hospitals.

An interactive version for online searching and exporting of data was launched on the PHARMAC website at the end of October 2013, providing an accessible information and data tool for DHB prescribers and pharmacists. It allows users to move easily between the online community and hospital listings and provides brand, presentation, product size and pricing information.

The HML's introduction is also smoothing the way for medicines prescribed in hospital to be continued when a patient leaves hospital, if necessary for ongoing treatment, with more hospital medicines now being listed for use in the community as well as hospital. PHARMAC is continuing to work closely with hospitals on the list's contents and how it is being implemented; helping hospital clinicians transition to using the HML for all patient prescribing. Ongoing changes to HML rules are likely and in 2014 there will be increasing monitoring of restrictions and compliance.

Development of the HML is the first stage of a much longer journey. Future steps, some of which are already occurring, are new investments in hospital medicines (already taking place) and, eventually, full budget management.

Therapeutic group summaries

Overview of the year

The year's pharmaceutical investments continued a move towards treatments that offer patients and clinicians funded access to more 'personalised' medicine options.

Some medicines can be paired with testing that can help identify the people who would most benefit from the treatment. Such co-dependent technologies are already in use - for example DEXA bone density tests to determine who might be suitable for osteoporosis treatment.

These technologies, which assist clinicians in providing more targeted treatments to specific patient groups, grew in the past year with the funding of gefitinib (Iressa) for lung cancer (see page 14).

Gefitinib's listing is also part of the shift towards cancer tablets, replacing in-hospital infusions or injections which can be inconvenient for patients and resource intensive for hospitals.

Another decision in line with this trend was the widening of access to capecitabine, which is used in place of infusional fluorouracil in a variety of cancers. These medicines offer more convenience for patients and support the Government's priority to reduce hospital cancer treatment waiting times.

High value new listings (through Combined Pharmaceutical Budget funding) included insulin pumps and consumables for diabetes, and filgrastim, a cancer-related blood treatment, which each saw $2 million invested.

HIV/AIDs patients also benefited from the move towards combination products reducing the number of pills that patients need to take. Two new treatments, combining into a single tablet a number of different HIV medicines that are often prescribed separately, were made available at cost of $4.5 million per year.

The two funded combination inhalers for asthma continued their rise in use, both reaching the top 10 list of medicines by gross cost – fluticasone with salmeterol (Seretide) at a cost of around $21 million being our third highest spend and budesonide with eformoterol (Symbicort) at just under $19.5 million, ranked at fifth highest spend. Adalimumab (for multiple indications including rheumatoid arthritis) topped the expenditure rankings at just over $52.5 million (see table on page 23).

As part of our new role to manage the national immunisation schedule from July 2012, we responded to two key areas of concern.

One of these was widening access to the influenza vaccine for children under five with significant respiratory illness. Secondly, in a move designed to provide additional protection for newborn babies, funded access to pertussis (whooping cough) vaccine was provided for pregnant women from 28 weeks. PHARMAC took advice from the newly-formed immunisation subcommittee of PTAC, and from PTAC itself, in making these decisions.

Heart medicines continued to show on the radar in terms of new expenditure. The ongoing funding of warfarin-alternative, dabigatran (our biggest new investment in the 2011/2012 year) saw it enter the top 20 medicines by gross cost (before rebates) at number four.

Another cardiovascular treatment, ticagrelor (Brilinta), was funded for the first time for patients who have experienced heart attacks.

As well as spending new money on additional medicines (such as those outlined above), PHARMAC's management of the pharmaceutical budget includes getting better value from existing pharmaceutical spending by working for price reductions on funded medicines through negotiated contracts and other commercial processes.

Overall we estimate the funding decisions made during the 2012/13 year benefited more than 52,000 patients. That figure is expected to rise to almost 76,000 in 2013/14. In terms of existing medicines, we estimate $62 million of savings were achieved in 2012/13. These savings are important, as they release funding that can be reinvested in new medicines, additional DHB healthcare services and rising prescription numbers.

In total, we added 20 new medicines to the schedule and widened access to 40 more.

Pharmaceutical suppliers ranked by gross subsidies

(CPB only)

Supplier	Gross Expenditure
Roche	$132.9 M
GlaxoSmithKline	$86.6 M
Pfizer	$84.0 M
Abbvie	$66.4 M
Novartis	$61.5 M
Mylan New Zealand Ltd	$46.4 M
Janssen	$41.3 M
Merck, Sharp & Dohme	$33.6 M
AstraZeneca	$33.4 M
Sanofi-Aventis	$30.4 M
Arrow Pharmaceuticals Ltd	$23.8 M
CSL Pharmaceuticals NZ Ltd	$22.9 M
Pharmaco (NZ) Ltd	$19.4 M
AFT	$18.0 M
Douglas Pharmaceuticals Ltd	$17.6 M

- Expenditure has been grouped by the parent company

Expenditure figures given for individual pharmaceuticals are gross and may be subject to rebates that PHARMAC negotiates with suppliers - leading to overall cost reductions in the investment for the supply of the pharmaceutical. The actual price paid may be lower than the gross figure.

Cancer treatments

Key decisions:

- Funded gefitinib (Iressa) for first line targeted treatment of non small cell lung cancer.
- Removal of Special Authority requirements from six cancer treatments
- Funded a biosimilar filgrastim (Zarzio) in the community and widened access to this medicine

PHARMAC listed gefitinib as a first line treatment for non-squamous advanced non-small cell lung cancer, the most common form of lung cancer in New Zealand. A test, called epidermal growth factor receptor (EGFR) testing, helps determine which patients will most benefit from treatment with gefitinib, or erlotinib, another similar drug already funded. Erlotinib is currently funded as a second-line treatment option.

The decision led to spending of just over three quarters of a million dollars in the 2012/13 year.

Gefitinib is a tablet which does not require patients to visit hospital to receive their treatment – so funding provided greater convenience for lung cancer patients and the opportunity for other cancer patients to receive hospital infusion services. PHARMAC expects the number of patients receiving funded gefitinib will double in the next financial year to over a hundred, with an annual spend of up to $1.6 million.

Removal of Special Authority

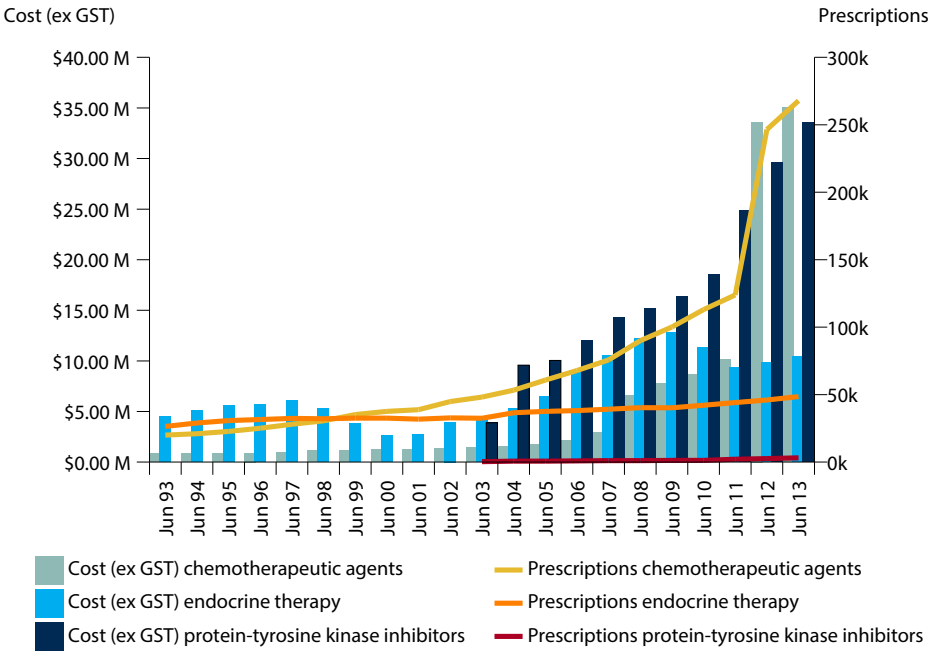
From 1 December 2012 PHARMAC removed the Special Authority criteria from the following cancer treatments:

- Anagrelide
- Gemcitabine
- Irinotecan
- Oxaliplatin
- Vinorelbine
- Capecitabine

In addition to enabling more cancer patients to access these treatments, removing the Special Authorities significantly reduced the administrative workload for clinicians and pharmacists, allowing these resources to be redirected to 'front line' clinical work and assisting with the Government 2012/13 health target of "shorter waits for cancer treatment".

- PHARMAC included funding in the CPB for pharmaceutical cancer treatments from 2011/12.

Oncology agents

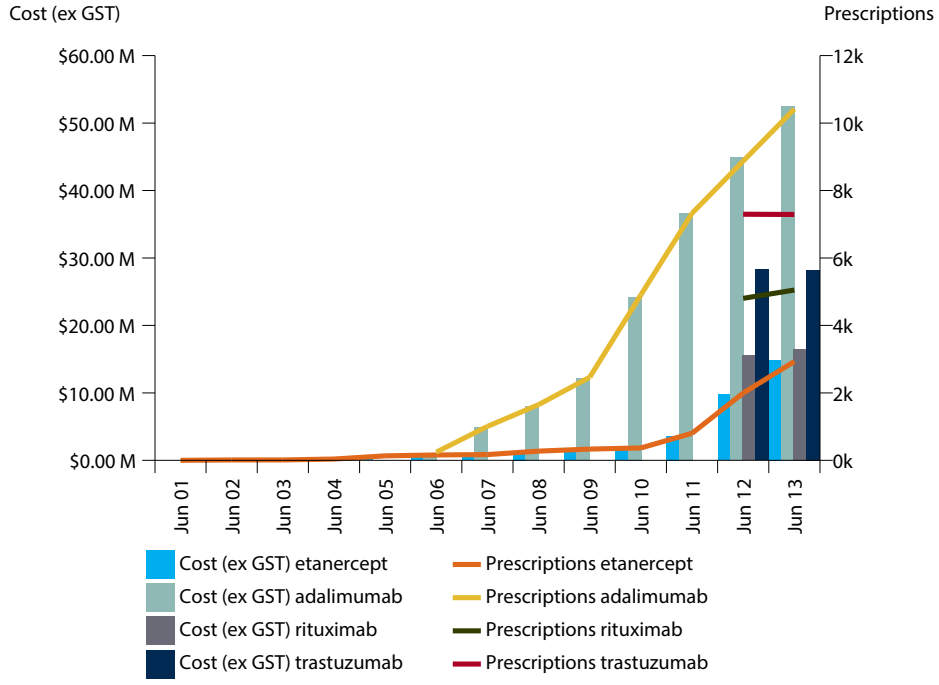


Filgrastim

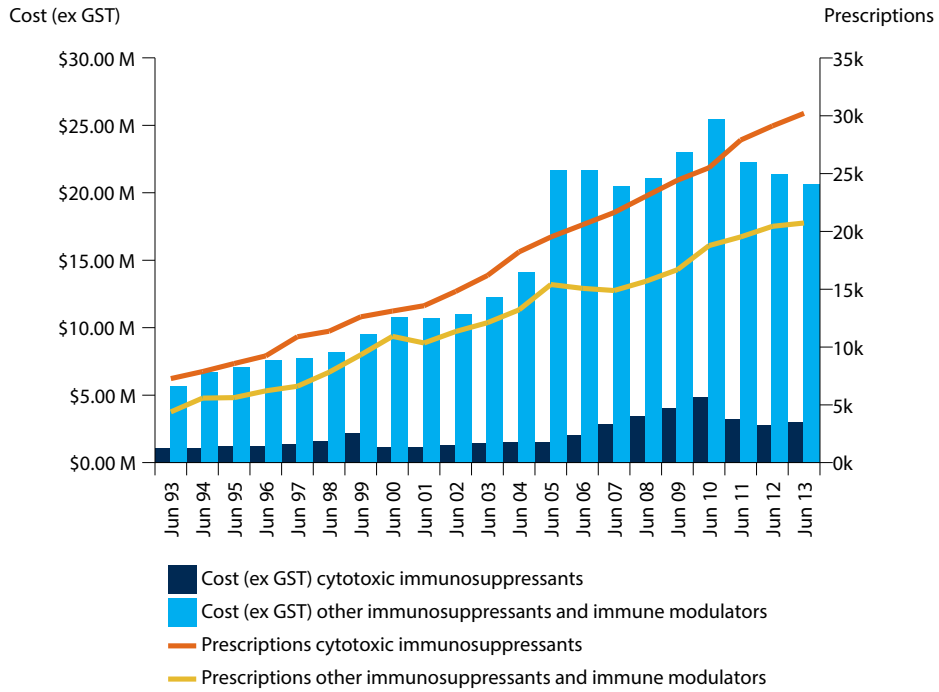
One of the first Schedule listings of a biosimilar was made in September 2012 for filgrastim (Zarzio), a treatment for neutropenia (low white blood cell count) in cancer patients and other at-risk patients. At an estimated initial spend of $2 million, Zarzio was listed both as the only funded brand of filgrastim in the community, and as the only brand for use in DHB hospitals until December 2015.

Biosimilars are competitor products for biologic drugs (drugs made from living organisms) *see box below.* Competition from biosimilars like Zarzio is expected to continue to grow in coming years, increasing the opportunities for PHARMAC to reduce prices on biologic medicines and deliver greater health gains from pharmaceutical spending.

Fusion proteins and monoclonal antibodies



Immunosuppressants



What is a biosimilar?

Biologic pharmaceuticals differ from most pharmaceuticals in that they are made in, or from, living organisms or systems. They are brewed or made in batches. By contrast, most pharmaceuticals are chemicals that are made synthetically. Biologics range in complexity from purified blood products, through to large and complex monoclonal antibodies.

Examples of currently available biologics include insulins to treat diabetes, human growth hormone, erythropoietins for low red blood cell count, and monoclonal antibodies that treat auto-immune disorders and some types of cancer.

Because they are made from, or of, living organisms, biologics cannot be replicated in the same way as `small molecule' pharmaceuticals. This is a challenge for regulators worldwide, as copies of biologic drugs cannot be considered to be exact replicas of the original biologic product. This has given rise to a new class of drugs, the biosimilars, which are competitor products for biologic drugs.

Musculoskeletal

Key decisions:

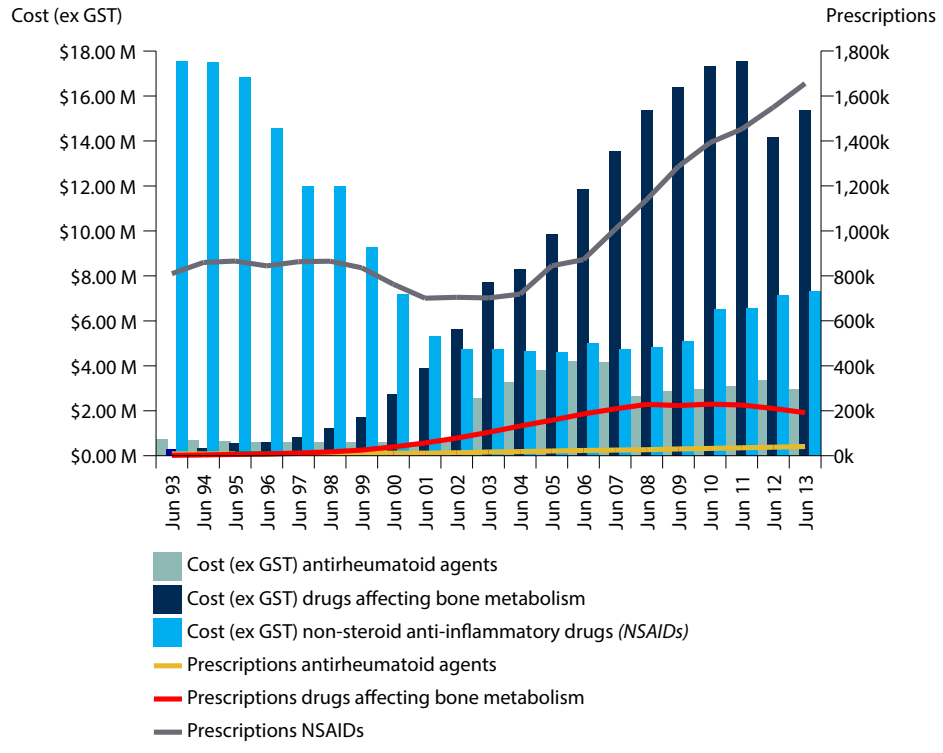
- First contract for the new Hospital Medicines List (HML) – parecoxib
- Access widened to rituximab for rheumatoid arthritis on the HML
- Listing of tocilizumab on the HML for systemic juvenile idiopathic arthritis
- Decision to widen access to adalimumab for juvenile idiopathic arthritis (and for fistulising Crohn's disease)

Parecoxib, a surgical pain management injection, was listed for use in DHB hospitals and was a significant milestone, becoming the first product to come under a national contract with PHARMAC specifically for inclusion on the newly developed HML.

The HML's development (introduced 1 July 2013) also saw widened funded access to rituximab (Mabthera), adding rheumatoid arthritis to the indications rituximab is funded to treat. Rituximab had been previously funded for some cancer treatments (lymphoma and chronic lymphocytic leukaemia) but now arthritis patients will also have nationally-consistent access to this treatment.

Access to adalimumab (Humira and HumiraPen) was widened to include the treatment of juvenile idiopathic arthritis and fistulising Crohn's disease. This medicine tops the PHARMAC list in terms of gross expenditure at over $52 million (excluding rebates) for the year (see table page 23).

Musculoskeletal



Cardiovascular

Key decisions

- Funding of new generation blood thinning drug ticagrelor (Brilinta)
- Widened access to cardiac drug candesartan

Heart disease continues to be one of New Zealand's leading causes of death, with higher rates among men than women and amongst Māori and Pacific men. The funding of anti-platelet treatments like ticagrelor, for acute coronary syndrome (ACS), continues to target the prevention of future heart attacks.

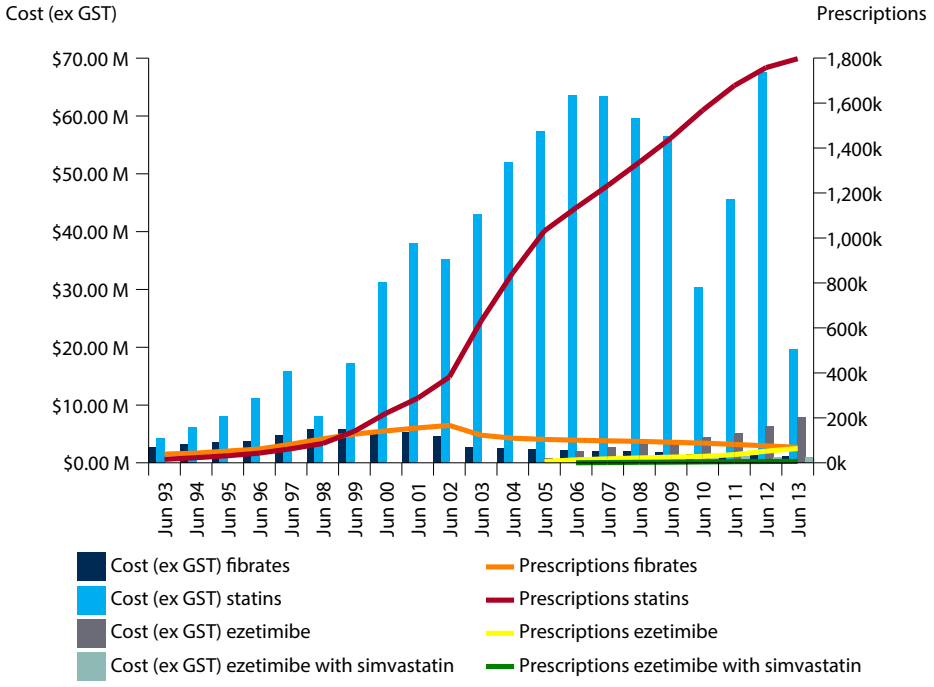
Ticagrelor is expected to support and replace standard treatments such as low-dose aspirin, clopidogrel and prasugrel. Evidence from an 18,000 patient trial comparing ticagrelor treatment with clopidogrel (the PLATO trial) showed significant reduction in heart attack rates, both survived and fatal, in patients using ticagrelor.

About 3300 people in the first year of listing, and up to 12,200 by the fifth year, are expected to benefit from ticagrelor treatment. Gross costs are expected to total up to $14.3 million per year (excluding rebates).

Brand changes

The introduction of a changed brand of the heart drug candesartan, and a price reduction, provided the opportunity for PHARMAC to widen access to this drug for hypertension and heart failure. This change has the potential to benefit over 17,000 people through 2013/14.

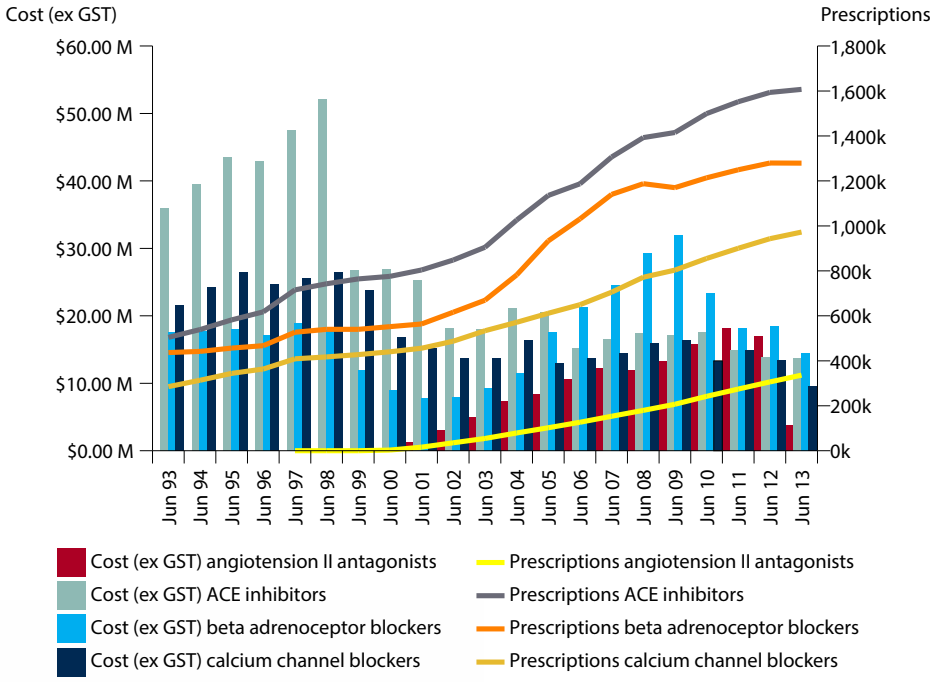
Lipid modifying agents



One Heart Many Lives

This PHARMAC developed awareness programme targeted Māori and Pacific men, encouraging heart checks and lifestyle action plans, as well as treatment if the diagnosis is not good. Programmes like this contribute to the ongoing trend being seen in increased use of statins, ACE inhibitors and other blood pressure treatments. The graph opposite demonstrates the significant patient and prescription demand for the cardiovascular therapeutic group medicines.

Blood pressure management



ONE HEART MANY LIVES

Diabetes

Key decisions:

- Estimated $10 million per annum savings through changes to funded blood glucose testing meters and strips
- Two brands of insulin pumps funded (from 1 Sept 2012 and January 2013) nationally for the first time

Glucose testing

Almost 100,000 people with diabetes had changed to using one of the new funded blood glucose meters by the end of the financial year. These hand-held devices assist people to manage their diabetes by measuring the amount of glucose in their blood.

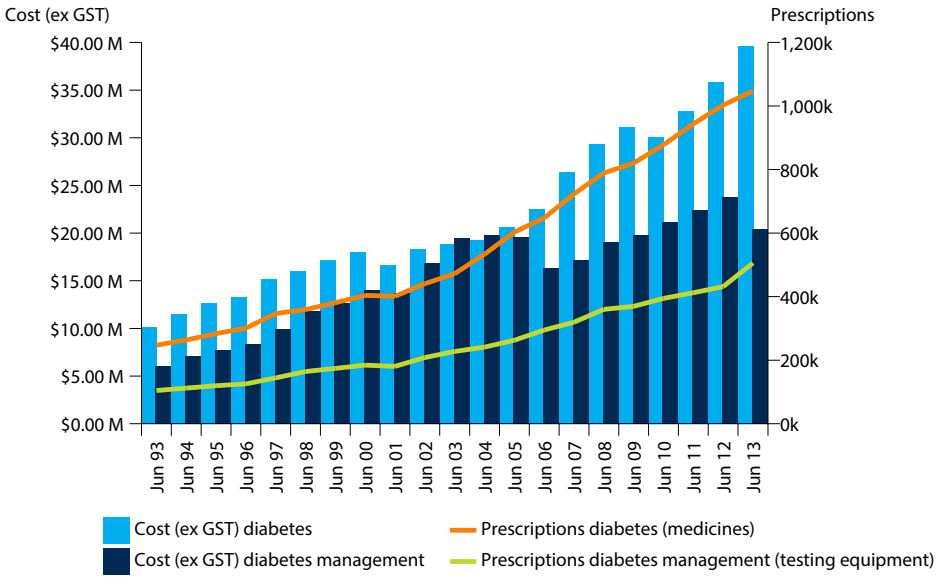
Freeing up $10 million to spend on other medicines each year, the brand change began from 1 September 2012. This was a large scale change and adjustment for people. Public engagement around the testing equipment changes was significant, as people began to move on to the new meters from September 2012.

By the time sole supply of the new meters and strips began on 1 March 2013, more than half the people entitled to a subsidised meter had picked up a new meter. This required considerable input and advice from a range of health professionals, pharmacies and diabetes support groups nationwide, as well as PHARMAC's own education programmes, including 'Meet your Meter' events around the country.

PHARMAC and the supplier, Pharmaco, continue to offer ongoing information, advice and support, in addition to people's own front line health practitioners, where that is requested.

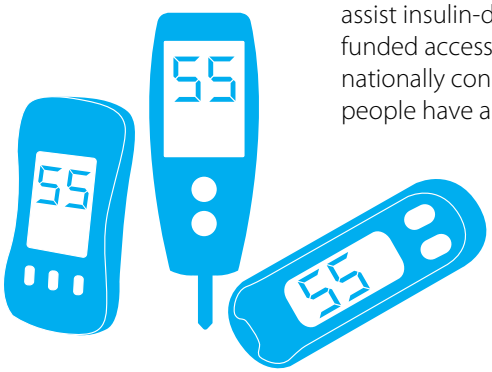
The supply agreement with Pharmaco to fund three different Caresens brand blood glucose meters and testing strips followed careful consideration of all consultation responses from clinicians and the public, alongside independent analysis of the meters' accuracy which established that they meet internationally-required standards.

Diabetes



Before the change began, PHARMAC responded to consultation feedback by making changes to its initial proposal. This included funding a meter with extra functionality (CareSens N POP) and continued funding for some patients, in certain circumstances, of the Accu-Chek and Freestyle Optium brands of blood glucose test strips.

Insulin pumps



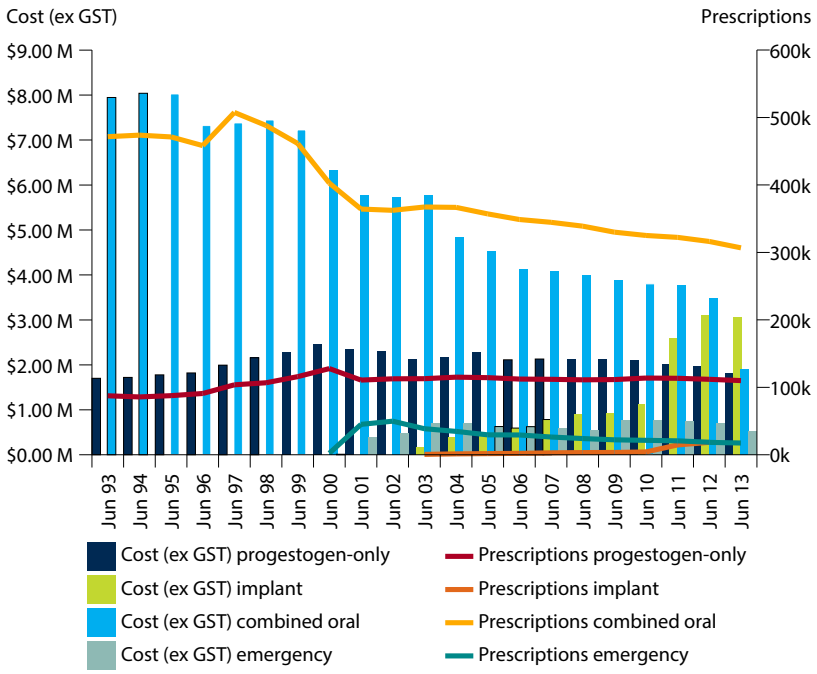
Insulin pumps are expensive equipment worth several thousands of dollars each. They can assist insulin-dependent people to better manage their diabetes. Before the PHARMAC decision, funded access to insulin pumps was patchy, with not all DHBs offering funded access. This is now nationally consistent, and expected to generate $3 million in annual spending. By June 2013, 547 people have already been approved for an insulin pump.

Contraceptives

The use of sub-dermal levonorgestrel implants (Jadelle), a long-acting reversible contraceptive, continued to be a trend in prescribing, maintaining the 2012 level with 18,000 prescriptions, at a cost of just over $3 million.

Listed in 2010, the implant has coincided with an ongoing decrease in the number of prescriptions for progestogen-only and combined oral contraceptives.

Contraceptives - Hormonal



Infections

Key decisions:

- Atripla and Truvada – combination medicines listed for HIV/AIDs.
- Funding oral antifungals in the community for treatment and prevention of aspergillus.

Two new combination HIV/AIDs treatments were funded from 1 December 2012. The new listings are expected to cost about $4.5 million per year (gross before rebates).

Atripla, a pill combining three already-funded medicines (efavirenz, emtricitabine and tenofovir) and Truvada, a combination of emtricitabine and tenofovir, are designed to make medicine regimens more convenient for HIV patients. They reduce the need for patients to take up to three pills at a time.

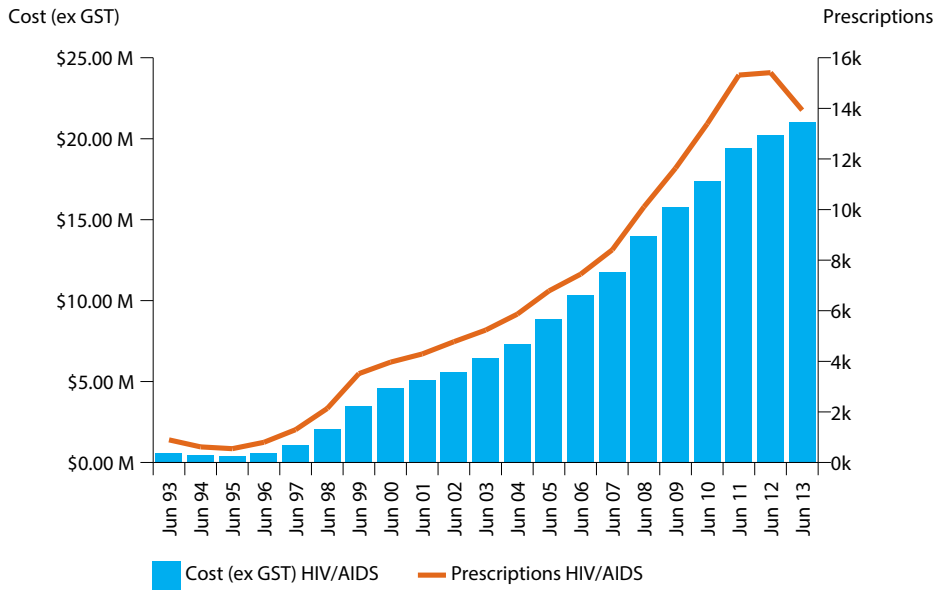
Individual components continue to be funded, allowing doctors to still tailor treatment to the needs of each patient. The medicines were funded under the same access criteria as the existing HIV medicines, and the number of HIV patients treated was not expected to increase significantly, with around 900 patients likely to use the product.

Extending infection prevention initiatives

As part of providing protection from infection for particularly vulnerable people, we continued to increase access for children and their families to preventive as well as treatment products. In 2012 PHARMAC extended funding for the whooping cough (pertussis) treatment and preventive, azithromycin, to include under 1 year olds. This year PHARMAC extended funded access to the pertussis vaccine for pregnant women.

This decision, estimated to benefit up to 30,000 women and their newborn babies, was the first change in access to funded vaccines made by PHARMAC since taking on national management of vaccines in July 2012.

HIV/AIDS



Our role in vaccines

PHARMAC was given responsibility for management of vaccines in July 2012.

Following this, PHARMAC extended funded access to vulnerable groups – funding for the influenza vaccine now includes children aged under five with severe respiratory illness.

The pertussis vaccine (whooping cough preventative) is now also funded for pregnant women offering additional benefit to newborn children during a pertussis outbreak.

During 2013, PHARMAC is running the tender for the full national immunisation schedule for the first time.

Asthma

- Space to Breathe He Tapu te Hā programme
- Montelukast listed for wheeze treatment in pre-schoolers

"The Space to Breathe Study was very well run and educational for us as a family. It helped us to understand how to assist our child."

"Thank you so much. The programme is very helpful. My child is doing really well."

"Fantastic study, great information and education on asthma and use of inhaler."

"The education and care we received during the study was fantastic. It far exceeds any expectations I had and was very helpful for our family."

Managing children's asthma

The Space to Breathe - He Tapu te Hā programme wrapped up in Auckland, after a one year project and earlier Taranaki pilot to look at how early childhood education programmes (in centres like Playcentre, kōhanga reo, or kindergartens) can help young children better manage asthma.

The pilot looked at how successful education in the use of inhaled corticosteroids (ICS) and set therapy plans are as an intervention to help children and their families maintain better asthma control. The final results of this pilot are expected to be published in 2014.

New treatments

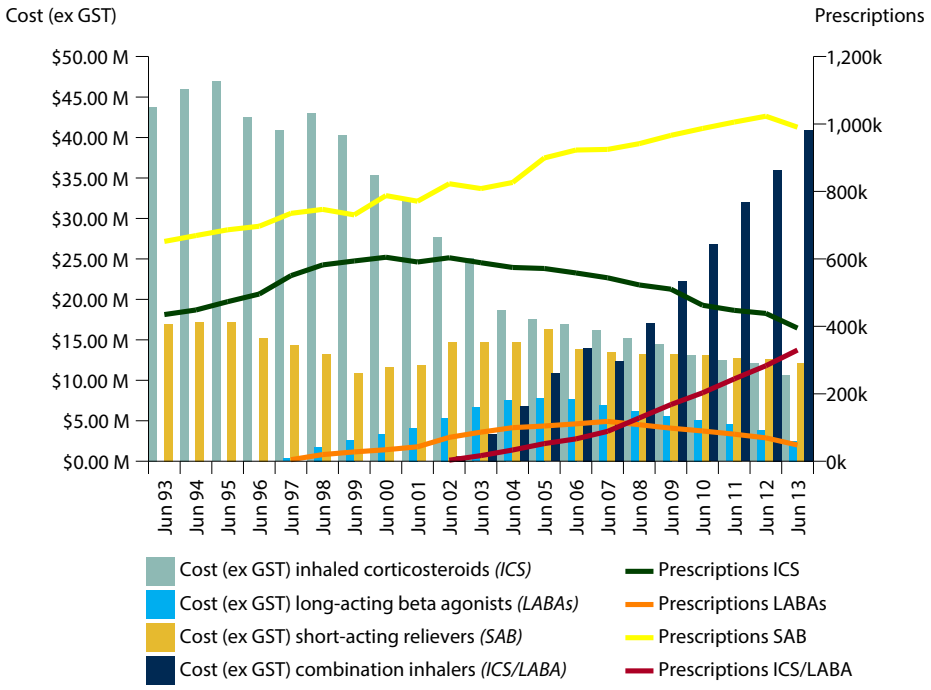
From August 2012 an alternative asthma treatment was offered to pre-schoolers with recurrent wheezing despite using other therapies, such as the standard inhaler treatment. The treatment, montelukast, was also made available for people suffering from exercise-induced asthma and people undergoing aspirin desensitisation programmes.

Many children suffer from wheezing which is often caused by respiratory tract infections and often means a hospital visit. The montelukast decision should reduce the number of child admissions to hospital for breathing difficulties and offer funded treatment to up to 7500 children.

People with asthma brought on by exercise will continue to largely be treated with asthma inhalers. If these are not effective then funded montelukast is available and we expect around 2000 people will benefit from this.

Space to Breathe
taking care of asthma

Asthma



Top 20 Medicines by Prescription numbers

		Treats	Year Ending Jun 13
1	Paracetamol	Pain	**2,440,000**
2	Aspirin	CV risk	**1,360,000**
3	Omeprazole	Reflux	**1,190,000**
4	Amoxycillin	Bacterial infection	**1,160,000**
5	Metoprolol succinate	Heart disease	**970,000**
6	Simvastatin	Raised cholesterol	**950,000**
7	Ibuprofen	Pain	**840,000**
8	Salbutamol	Asthma	**840,000**
9	Atorvastatin	Raised cholesterol	**830,000**
10	Amoxycillin clavulanate	Bacterial infection	**810,000**
11	Cilazapril	Heart disease	**670,000**
12	Cholecalciferol	Osteoporosis	**650,000**
13	Diclofenac sodium	Pain	**590,000**
14	Prednisone	Steroid	**590,000**
15	Zopiclone	Insomnia	**520,000**
16	Metformin hydrochloride	Diabetes	**500,000**
17	Flucloxacillin sodium	Bacterial infections	**500,000**
18	Levothyroxine	Thyroid gland deficiency	**470,000**
19	Loratadine	Allergies	**470,000**
20	Felodipine	Heart disease	**450,000**
		Total:	**16,800,000**

Top 20 Medicines by ex Manufacturer cost *(ex GST and rebates)*

		Treats	Year Ending Jun 13
1	Adalimumab	Autoimmune disease	**$52,540,000**
2	Trastuzumab	Breast cancer	**$28,650,000**
3	Fluticasone with salmeterol	Asthma	**$21,460,000**
4	Dabigatran	Blood clotting	**$20,120,000**
5	Budesonide with eformoterol	Asthma	**$19,490,000**
6	Imatinib mesylate	Leukaemia	**$18,870,000**
7	Blood glucose diagnostic test strip	Diabetes	**$18,080,000**
8	Atorvastatin	Raised cholesterol	**$16,900,000**
9	Rituximab	Cancer	**$16,540,000**
10	Venlafaxine	Depression	**$16,350,000**
11	Etanercept	Auto immune disease	**$14,840,000**
12	Pneumococcal vaccine	Pneumococcal infection	**$12,890,000**
13	Risperidone	Psychosis	**$12,830,000**
14	Bortezomib	Cancer	**$12,730,000**
15	Insulin glargine	Diabetes	**$12,350,000**
16	Tiotropium bromide	COPD	**$11,800,000**
17	Varenicline tartrate	Smoking cessation	**$11,400,000**
18	Sodium valproate	Epilepsy	**$9,980,000**
19	Diphtheria, tetanus, pertussis, polio, hepatitis B and haemophilus influenzae type B vaccine	Infections	**$9,480,000**
20	Fluticasone	Asthma	**$9,370,000**
		Total:	**$346,270,000**

Top 20 expenditure groups, 2013

($millions ex GST and rebates)

Rounded to the nearest $10,000.

Drug Type	Main Use	Current Ranking	Ranking Last FYr	Jun 08	Jun 09	Jun 10	Jun 11	Jun 12	Jun 13
Immunosuppressants	Organ transplants, arthritis	1	1	$25.18	$31.04	$43.94	$56.14	$114.35	**$127.83**
Chemotherapeutic Agents	Cancer	2	3	$21.14	$23.36	$26.23	$33.88	$61.94	**$67.10**
Inhaled Long-acting Beta-adrenoceptor Agonists	Asthma	3	4	$23.26	$27.85	$31.84	$36.54	$39.87	**$43.46**
Vaccines	Vaccinations	4	-	-	-	-	-	-	**$42.42**
Diabetes	Diabetes	5	5	$29.36	$31.07	$30.07	$32.80	$35.85	**$39.58**
Antithrombotic Agents	Stopping blood clots	6	10	$10.34	$9.47	$11.10	$11.04	$26.55	**$32.12**
Lipid Modifying Agents	Raised cholesterol (cardiovascular risk)	7	2	$66.06	$63.50	$37.87	$53.53	$76.53	**$30.07**
Antipsychotics	Mental health (psychoses)	8	6	$60.58	$61.61	$66.19	$60.17	$32.86	**$30.07**
Antiepilepsy Drugs	Epilepsy	9	8	$24.21	$25.45	$24.47	$25.60	$27.23	**$28.59**
Analgesics	Pain relief	10	12	$18.93	$21.27	$23.13	$24.75	$24.76	**$24.96**
Antidepressants	Mental health (depression)	11	9	$20.81	$22.26	$24.20	$24.70	$26.63	**$24.11**
Treatments for Substance Dependence	Addiction	12	11	$0.52	$0.57	$5.91	$27.05	$24.94	**$23.24**
Diabetes Management	Blood glucose monitoring	13	13	$19.03	$19.80	$21.20	$22.41	$23.84	**$23.11**
Antiretrovirals	HIV/AIDS, viral infections	14	15	$12.34	$12.97	$14.54	$16.77	$17.77	**$20.95**
Agents Affecting the Renin-Angiotensin System	Raised blood pressure (cardiovascular risk)	15	7	$29.94	$31.20	$34.47	$34.55	$31.66	**$17.83**
Anticholinergic Agents	Allergies	16	18	$10.47	$12.25	$13.35	$14.02	$14.76	**$15.41**
Drugs Affecting Bone Metabolism	Osteoporosis	17	19	$15.34	$16.35	$17.30	$17.50	$14.16	**$15.34**
Antivirals	Viral infections	18	17	$5.86	$7.79	$10.01	$12.72	$15.18	**$14.87**
Antibacterials	Bacterial infections	19	16	$15.48	$16.40	$15.63	$17.49	$17.49	**$14.43**
Beta Adrenoceptor Blockers	Heart disease	20	14	$29.29	$32.02	$23.32	$18.22	$18.53	**$14.43**

Directory

As at December 2013

The PHARMAC Board

Chairman

Stuart McLauchlan BCom, FCA(PP), AF InstD

Directors

Kura Denness (Te Atiawa) MBA CA

Dr David W Kerr MBChB, FRNZCGP (Dist), FNZMA

Prof Jens Mueller JurDr LLM MBA MSAM

Dr Jan White MBBS, MHP, FRACMA, FNZIM

PHARMAC's Management Team

Chief Executive

Steffan Crausaz BPharm, MSc

Senior leadership team

Sarah Fitt - Director of Operations

Dr Peter Moodie BSc, MBChB, FRNZCGP - Medical Director (until 31 December)

Jude Urlich MPP(Dist), BA, DipBsStd(PR), APR - Director Engagement and Implementation

Dr John Wyeth MBChB, MD, FRACP, FRCP (London) - Medical Director

Director Corporate Services - vacant

PHARMAC's Advisory Committees

Pharmacology and Therapeutics Advisory Committee (PTAC)

Chair

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

Deputy Chair – vacant at present

Committee members

Melissa Copland PhD, BPharm(Hons), FNZCP, MCAPA, MPS, PharmReg

Stuart Dalziel MBChB, PhD, FRACP

Ian Hosford MBChB, FRANZCP, psychiatrist

George Laking MD, PhD, FRACP

Graham Mills MBChB, MTropHlth, MD, FRACP

Mark Weatherall BA, MBChB, MApplStats, FRACP

Marius Rademaker MRCP (UK), JCHMT,DM,FRCP, FRACP

Jane Thomas MBCHB, FANZCA, FFPMANZCA, MMed (Pain Mgt) University of Sydney

Sean Hanna MBChB, FRNZCGP, FRACGP, PGDipGP (Dist), PGCertClinEd

PTAC Sub-committees

Analgesic: Dr Ian Hosford (PTAC,Chair) Psychogeriatrician, Dr Rick Acland (Rehabilitation Specialist), Dr Jonathan Adler (SMO Palliative Medicine), Dr Kieran Davis (Anaesthetist), Dr Bruce Foggo (Palliative Medicine Consultant), Dr Christopher Jephcott (Anaesthetist), Dr Geoff Robinson (Chief Medical Officer/Addiction Medicine), Dr Jane Thomas (Paediatric Anaesthetist), Dr Howard Wilson (General Practitioner/Pharmacologist)

Anti-Infective: Dr Graham Mills (PTAC, Chair Infectious Disease Physician), Prof. Ed Gane (Hepatologist), Dr Emma Best (Paediatric Infectious Diseases Consultant), Dr Simon Briggs (Infectious Diseases Physician), Dr Steve Chambers (Clinical Director/ Infectious Disease Physician), Dr Iain Loan (General Practitioner), Dr Howard Wilson (General Practitioner/Pharmacologist), Dr Tim Matthews (General Physician), Dr Nigel Patton (Haematologist), Dr James Chisnall (General Practitioner), Dr Jane Morgan (Sexual Health Physician)

Cancer Treatments (CaTSoP): Sisira Jayathissa (PTAC, Chair, Physician), Prof. Carl Burgess (Chair, Physician/Clinical Pharmacologist) (Chair for part of 2013), Dr George Laking (PTAC, Oncologist), Dr Scott Babington (Radiation Oncologist), Dr Bernie Fitzharris (Oncologist), Dr Peter Ganly (Haematologist), Dr Vernon Harvey (Oncologist), Dr Tim Hawkins (Haematologist), Dr Anne O'Donnell (Oncologist), Dr Lochie Teague (Paediatric Haematologist/Oncologist)

Cardiovascular: Dr John Elliott (Cardiologist), Dr Richard Medlicott (General Practitioner), Dr Martin Stiles (Cardiologist), Assoc. Prof. Mark Weatherall (PTAC, Geriatrician), Prof. Mark Webster (Consultant Cardiologist)

Dermatology: Dr Melissa Copland (PTAC, Chair,Pharmacist), Ms Julie Betts (Wound Care Nurse)Dr Vincent Crump (General Physician), Dr Paul Jarrett (Dermatologist), Dr Diana Purvis (Dermatologist), Dr Marius Rademaker (PTAC,Dermatologist), Dr Stewart Reid (General Practitioner), Mrs Pip Rutherford (Wound Care Nurse)

Diabetes: Dr George Laking (PTAC, Chair, Oncologist), Dr Chris Cameron (PTAC,General Physician and Clinical Pharmacologist), Dr Nick Crook (Diabetologist), Dr Craig Jefferies (Paediatric Endocrinologist), Dr Peter Moore (Physician), Miss Andrea Rooderkerk (Diabetes Nurse Specialist), Dr Bruce Small (General Practitioner)

Endocrinology: Dr Anna Fenton (Endocrinologist), Dr Ian Holdaway (EndocrinologistDr Craig Jefferies (Paediatric Endocrinologist), Dr Stella Milsom (Endocrinologist), Dr Esko Wiltshire (Paediatric Endocrinologist), Dr Bruce Small (General Practitioner), Dr Howard Wilson (General Practitioner/Pharmacologist)

Gastrointestinal: Dr Ian Hosford (PTAC,Chair, Psychogeriatrician), Assoc Prof Alan Fraser (Gastroenterologist), Prof Murray Barclay (Gastroenterologist, Clinical Pharmacologist), Prof Ed Gane (Hepatologist), Dr Russell Walmsley (Gastroenterologist), Dr Simon Chin (Paediatric Gastroenterologist), Dr Sean Hanna (PTAC, General Practitioner)

Haematology: Assoc Prof Mark Weatherall (PTAC, Chair, Geriatrician), Assoc Prof Paul Ockelford (Haematologist), Assoc Prof John Carter (Haematologist), Dr Nigel Patton (Haematologist), Dr Nyree Cole (Paediatric Haematologist), Dr Paul Harper (Haematologist), Dr Tim Hawkins (Haematologist)

Hospital Pharmaceuticals: Assoc. Prof. Mark Weatherall (PTAC, Chair, Geriatrician), Dr Paul Tomlinson (Deputy Chair, Paediatrician), Mr Billy Allan (Pharmacist), Prof. Murray Barclay (Gatroenterologist/Clinical Pharmacologist), Marilyn Crawley (Pharmacist), Dr Matthew Dawes (Clinical Pharmacologist), Jan Goddard (Pharmacist), Dr Andrew Herbert (Gastroenterologist), Chris Jay (Pharmacist), Dr Andrew Stanley (Respiratory Physician)

Immunisation: Dr Stuart Dalziel (PTAC, Chair, Paediatrician), Dr Tim Blackmore (Infectious Diseases Specialist/ Microbiologist), Dr Cameron Grant (Assoc. Prof in Paediatrics), Sean Hanna (PTAC, General Practitioner), Prof Karen Hoare (Nurse Practitioner/ Senior lecturer), Dr Caroline McElnay (Public Health Medicine Specialist/ Medical Officer of Health), Dr David Murdoch (Head of Pathology), Dr Patricia Priest (Public Health Medicine Specialist/ Epidemiologist), Dr Gary Reynolds (General Practitioner), Dr Nikki Turner (Director of Immunisation), Dr Tony Walls (Paediatrician / Infectious Diseases Specialist), Dr Elizabeth Wilson (Paediatric Infectious Diseases Specialist)

Mental Health: Dr Ian Hosford (PTAC, Chair, Psychogeriatrician), Dr Matthew Eggleston (Paediatric Psychiatrist), Dr Verity Humberstone (Psychiatrist), Dr Gavin Lobo (General Practitioner), Assoc. Prof. Dee Mangin (PTAC, General Practioner, Clinical Researcher), Prof. Richard Porter (Psychiatrist), Assoc. Prof David Menkes (General Psychiatrist)

Neurological: Assoc. Prof. Mark Weatherall (PTAC, Chair, Geriatrician), Dr Richard Hornabrook (General Practitioner), Dr Jim Lello (General Practitioner), Dr William Wallis (Neurologist), Dr Paul Timmings (Neurologist), Dr John Mottershead (Neurologist), Dr Ian Rosemergy (Neurologist)

Ophthalmology: Dr Marius Rademaker (PTAC, Chair), Dr Neil Aburn (Ophthalmologist), Dr Rose Dodd (General Practitioner), Dr Steve Guest (Vitreoretinal Surgeon), Dr Jo Sims (Ophthalmologist), Dr Malcolm McKellar (Ophthalmologist), Mr Peter Grimmer (Optometrist)

Pulmonary Arterial Hypertension: Dr Howard Wilson (Chair, General Practitioner/Pharmacologist), Dr Andrew Aitken (Cardiologist), Dr Lutz Beckert (Respiratory Physician), Dr Clare O'Donnell (Paediatric Congenital Cardiologist), Dr Kenneth Whyte (Respiratory Physician)

Reproductive and Sexual Health Subcommittee: Dr Mira Harrison-Woolrych (Obstetrician and Gynaecologist), Dr Debbie Hughes (General Practitioner), Dr Frances McLure (General Practitioner), Dr Jane Morgan (Sexual Health Physician), Dr Ian Page (Obstetrician and Gynaecologist), Dr Helen Paterson (Obstetrician and Gynaecologist), Dr Christine Roke (Sexual Health Physician)

Respiratory: Dr Stuart Dalziel (PTAC, Chair, Paediatrician), Dr Jim Lello (General Practitioner), Dr Tim Christmas (Respiratory Physician), Dr Ian Shaw (Paediatrician), Dr David McNamara (Paediatric Respiratory Physician), Dr Greg Frazer (Respiratory Physician), Dr Justin Travers (Respiratory Physician), Dr Andrew Corin (General Practioner)

Rheumatology: Sisira Jayathissa (PTAC, Chair, Physician), Dr Melissa Copland (PTAC,) Pharmacist, Dr Andrew Harrison (Rheumatologist), Dr Nora Lynch (Rheumatologist), Dr Sue Rudge (Paediatric Rheumatologist), Prof Lisa Stamp (Rheumatologist), Assoc. Prof Will Taylor (Rheumatologist)

Special Foods: Dr Stuart Dalziel (PTAC, Chair, Paediatrician), Dr Simon Chin (Paediatric Gastroenterologist), Mrs Kim Herbison (Paediatric Dietician), Mrs Kerry McIlroy (Charge Dietician), Mrs Moira Styles (Community Dietician), Ms Victoria Logan (Community Dietician), Dr Russell Walmsley (Gastroenterologist), Assoc. Professor Dee Mangin (PTAC, General Practitioner/ Clinical Researcher), Dr Alan Jenner

Tender Medical: Dr Graham Mills (PTAC,Chair, Infectious Disease Physician), Dr Melissa Copland (PTAC, Pharmacist), Dr John McDougall (Anaesthetist), Ms Clare Randall (Palliative Care Clinical Pharmacist), Mr Geoff Savell (Pharmacist), Mr John Savory (Pharmacist), Dr David Simpson (Haematologist), Dr Ben Hudson (General Practitioner), Lorraine Welman (Chief Pharmacist/ President NZHPA), Mr William (Billy) Allan (Pharmacist)

Transplant Immunosuppressant: Dr Marius Rademaker (PTAC, Chair, Dermatologist) *(only at start of 2013)*, Dr Peter Ganly (Haematologist), Dr Stephen Munn (Transplant Surgeon), Dr Richard Robson (Nephrologist), Dr Peter Ruygrok (Cardiologist), Dr Kenneth Whyte (Respiratory Physician)

Consumer Advisory Committee (CAC)

Chair

Kate Russell – Chief Executive of Cystic Fibrosis NZ, Christchurch.

Deputy Chair

Anne Fitisemanu – Pacific Health, Counties Manukau DHB, Auckland.

Committee Members

Shane Bradbrook – tobacco control advocate, Wellington.

Maurice Gianotti – retired, Taupo.

Barbara Greer – psychiatric nurse, life member Māori Women's Welfare League, Hokitika.

Jennie Michel – Age Concern NZ board member, Auckland

Anna Mitchell – Chairperson of Canterbury Arthritis Advocates, Christchurch

Katerina Pihera – member of the Māori Public Health Leadership Group, Lakes DHB, Rotorua.

Panels

Adult Growth Hormone Panel: Prof Ian Holdaway (Chair, Endocrinologist), Prof. Wayne Cutfield (Paediatric Endocrinologist), Dr Penny Hunt (Endocrinologist), Assoc. Prof. Patrick Manning (Endocrinologist)

NPPA: Dr Howard Wilson (Chair, General Practitioner/Pharmacologist), Dr Andrew Herbert (Consultant Gastroenterologist), Dr Sharon Kletchko (Specialist Physician), Dr George Laking (Oncologist), Dr David Waite (Physician).

Cystic Fibrosis Advisory Panel: Dr Cass Byrnes (Respiratory Paediatrician), Dr Richard Laing (Respiratory Physician), Dr Mark O'Carroll (Respiratory Physician), Dr Ian Shaw (Paediatrician)

Gaucher Treatment Panel: Dr Ian Hosford (Chair, Psychiatrist), Dr Timothy Hawkins (Haematologist), Dr Callum Wilson (Metabolic Consultant), Dr Mark Coates (Radiologist)

Insulin Pump Panel: Dr George Laking (Chair, Oncologist), Dr Nic Crook (Consultant Endocrinologist), Dr Peter Dunn (Clinical Director – Waikato Regional Diabetes Service), Dr Craig Jefferies (Paediatric Endocrinologist), Ms Bridget Lydon (Clinical Nurse Specialist – Diabetes), Ms Jenny Rayns (Diabetes Nurse Specialist)

Multiple Sclerosis Treatment Assessment Committee: Dr Ernest Willoughby (Chair, Neurologist), Dr David Abernethy (Neurologist), Dr Neil Anderson (Neurologist), Dr Alan Wright (Neurologist)

New Zealand Growth Hormone Committee: Prof Wayne Cutfield (Chair, Paediatric Endocrinologist), Prof Alistair Gunn (Paediatrician),Assoc Prof Paul Hofman (Paediatric Endocrinologist)

Pulmonary Arterial Hypertension Panel: Dr Howard Wilson (General Practitioner/Pharmacologist), Dr Andrew Aitken (Cardiologist), Dr Lutz Beckert (Respiratory Physician), Dr Clare O'Donnell (Paediatric Congenital Cardiologist), Dr Kenneth Whyte (Respiratory Physician)

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Pharmaceutical Management Agency
Level 9, 40 Mercer Street, PO Box 10-254, Wellington 6143, New Zealand
Phone: 64 4 460 4990 - Fax: 64 4 460 4995 - www.pharmac.govt.nz
Freephone Information line (9am-5pm weekdays) 0800 66 00 50