



PHARMAC  
TE PĀTAKA WHAIORANGA



YEAR IN REVIEW

2018





## CONTENTS

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- 1 Snapshot: 2018 in review
- 3 Learning from our past,  
looking to our future
- 8 Introducing  
Te Pātaka Whaioranga
- 9 Growing Te Whaioranga
- 11 Pacific Responsiveness  
Strategy – one year on
- 13 Involving consumers in  
what we do
- 15 Being bold
- 17 Therapeutic group review
- 20 Therapeutic group summaries
- 30 Directory

# SNAPSHOT: 2018 IN REVIEW

## COMBINED PHARMACEUTICAL BUDGET 2017/18

\$870.8m

DHBs' combined pharmaceutical expenditure (on budget)



45.8m

funded prescription items filled



3.7m

New Zealanders receiving funded medicines  
(2.2 percent increase)



\$59m

savings achieved



13

new medicines funded



39

medicines with access widened



331,700

estimated number of additional patients benefitting from decisions



**HOSPITAL MEDICINES 2017/18**

**HOSPITAL MEDICAL DEVICES 2017/18**

\$6.7m

full-year savings to DHB hospitals from hospital medicines decisions



31,000

additional line items on the Pharmaceutical Schedule under national contracts



2

hospital medicines with access widened



\$15.6m

net savings over five years from contracts during the year



\$36.4m

savings over five years after costs of new investments



\$55.4m

savings over five years from all contracting to date



2

new hospital medicines funded



\$179m

total value of medical devices under PHARMAC contract



# LEARNING FROM OUR PAST, LOOKING TO OUR FUTURE

SARAH FITT,  
CHIEF EXECUTIVE



What a momentous year 2018 has been! Not only did we look back and celebrate PHARMAC's 25 years of delivering value to New Zealanders, we also did a lot of planning to position us to ensure we continue to meet our objectives for the future.

A key part of that future focus can be seen in the look and feel of this Year in Review, which officially launches the new expression of our identity, Te Pātaka Whaioranga.

Incorporating Te Reo Māori into our name signals our commitment to Te Tiriti o Waitangi, and our updated identity shows that PHARMAC is focused on adapting to the future as we continue to build on the solid foundations of our past.

I'd like to highlight a number of other significant accomplishments and progress this year, including:

- funding more medicines for more New Zealanders
- taking on the full budget management of all hospital medicines
- our growing involvement with the management of hospital medical devices
- our focus on reducing inequities in access to medicines
- important work towards ensuring the community's voice is reflected in what we do and how we do it.

This year, we welcomed our new PHARMAC Board Chair, Hon Steve Maharey. Steve brings a wealth of knowledge to the Board and we look forward to his guidance and oversight as we take on new challenges. We would like to acknowledge Stuart McLauchlan, who served as Chair for eight years. Stuart's contribution to PHARMAC was immeasurable and we wish him the best for the future.

## MORE MEDICINES FOR MORE NEW ZEALANDERS

During the year, PHARMAC continued to expand the range of funded medicines available to New Zealanders.

We funded 13 new medicines, including the shingles vaccine, Zostavax, a quadrivalent influenza vaccine for the 2018 flu season, and aflibercept for degenerative eye conditions.

# 25 YEARS

# 66

Engagement with the wider community was a major focus of our work this year 99

We also widened access to 39 currently funded medicines, including emtricitabine with tenofovir disoproxil fumarate (Truvada) to prevent HIV infection (PrEP), zoledronic acid for the adjuvant treatment of early breast cancer in postmenopausal patients, five treatments for pulmonary arterial hypertension (PAH), and rivaroxaban, an anticoagulant used for preventing strokes and for preventing or treating blood clots.

In total, these decisions benefited an additional 331,700 New Zealanders.

In addition, we listed two more medicines for use in public hospitals, including cetuximab for head and neck cancer, and widened access to a further two.

Widening of access included removing Special Authority criteria and restrictions. This allows a greater range of prescribers to initiate treatment, and means:



more people benefit from the medicines



there is less administration work for health professionals

Special Authority criteria and restrictions were removed from:

- Macrogol 3350
- Montelukast
- Gabapentin
- Tenofovir
- Entecavir
- Candesartan

## MANAGING THE FULL BUDGET FOR ALL HOSPITAL MEDICINES

The responsibility that the Minister of Health gave us this year to manage the funding for hospital medicines was a major expansion of our role.

As a result, PHARMAC now decides which medicines are publicly funded in New Zealand, whether they're dispensed through community or hospital pharmacies.

A key benefit of our expanded role is that it gives us greater scope to create efficiencies in spending across all medicines subsidised by the Government. Ultimately, this frees up more funding to reinvest in the health of New Zealanders.

## TOWARDS A NEW ERA OF MANAGING HOSPITAL MEDICAL DEVICES

This year, we brought more hospital medical devices - which include a vast array of products that aren't medicines but are used for diagnostic or therapeutic purposes - under national contracts.

These contracts enable all District Health Board (DHBs) to purchase products under the same terms.

This work is laying the foundations for our future role, decided by the Government, which will eventually see PHARMAC manage a nationally-consistent list of medical devices used in all DHB hospitals nationwide.

We'll soon be engaging with DHBs and others about the next phase of our work in managing medical devices.

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Our activities, including the annual tender, resulted in full-year savings of \$59 million 99

**SAVINGS**

As well as making investments in new medicines, PHARMAC works to make savings where we can. This enables the available funding to be used to treat more people.

Our activities, including the annual tender, resulted in full-year savings of \$59 million.

This roughly equates to the cost of running a regional District Health Board for a third of the year.

In a year when we celebrated 25 years of PHARMAC, it's interesting to reflect on the \$59 million savings this year, which compare well to the saving of \$3.1 million in PHARMAC's first full year of operation.

**MEDICINES FOR RARE DISORDERS**

Following the success of our contestable funding pilot, PHARMAC moved to formalise policy settings and set up a dedicated process for considering funding of medicines for rare disorders.

We published principles outlining a definition of rarity, along with the sort of medicines PHARMAC would consider when calling for funding applications from time to time.

Clinical advice on medicines for rare disorders will be sought from a new Rare Disorders Subcommittee, established in July 2018 as part of the new process.

Pharmaceutical companies responded positively to this year's call for funding applications, with 13 applications considered at the Rare Disorders Subcommittee's initial meeting in November 2018.

**Principles: Medicines for rare disorders**

1. The medicine has been approved by Medsafe, or an approved international regulatory authority, for the identified indication.
2. The disorder is a clinically defined disorder affecting an identifiable and measurable patient population with a prevalence of less than 1:50,000 in New Zealand.
3. The medicine is only registered for the treatment of the rare disorder, or if it is registered for other disorders (or is part of phase three clinical trials for other disorders), the cumulative prevalence across all indications still meets principle 2.

**COMBINED SPENDING**

Combined Pharmaceutical Budget spending for the year was on-budget at \$870.8 million. This enabled 45.8 million prescription items to be funded – an all-time high.

Most New Zealanders, 3.68 million of them, received a funded prescription item during the year.



## CPB INVESTMENT DECISIONS BY YEAR

Year	New listings	Widened access	Total
2017/18	13	39	52
2016/17	18	8	26
2015/16	15	6	21
2014/15	21	20	41
2013/14	26	35	61
2012/13	20	40	60
2011/12	14	10	24
2010/11	39	43	82
2009/10	20	25	45

## COMMUNITY ENGAGEMENT

Engagement with the wider community was a major focus of our work this year.

We went out to communities to seek their views on how we can improve the way we work with New Zealanders and involve them in our decision making.

We know that many people would like better insight into our decision-making processes, and the opportunity to have greater input into decisions.

It's important to us as a public organisation, that PHARMAC is accessible and responsive to people's needs, and work is already underway towards improvements based on the engagement we carried out this year.

Our anniversary celebration reinforced to us all what a huge contribution PHARMAC has made towards the health and wellbeing of New Zealanders over the past 25 years.

## IMPROVING ACCESS TO EMERGENCY CONTRACEPTION

We also enabled pharmacists to provide emergency contraception treatments without a prescription.

This increases the number of options for people to get timely access to emergency contraception.

This is an important step that will help prevent unwanted pregnancies, as the emergency contraceptive pill is most effective when taken as soon as possible.

## HELPING TO REDUCE SMOKING

One of the Government's health priorities is a Smokefree New Zealand by 2025.

We made changes to the Pharmaceutical Schedule that support this priority by enabling pharmacists to provide funded nicotine replacement therapy (NRT) without a prescription.

Allowing pharmacists to independently authorise NRT gives people an additional option to access these funded products, and in some cases, reduces the number of steps to get funded NRT.

## LOOKING AHEAD

This year marked my first year as Chief Executive, and it's been a privilege to continue PHARMAC's strong legacy and build a strong and supportive relationship with our Board and stakeholders across the health system.

It's exciting to be leading the organisation into the future, as it continues to grow and evolve to meet new challenges and fulfil its crucial role in our health system.



# TE PĀTAKA WHAIORANGA

We're proud to announce that PHARMAC has adopted Te Pātaka Whaioranga into our identity as an expression of who we are and the role we play in New Zealand.

Te Pātaka Whaioranga, 'the storehouse of wellbeing', sums up the part we play in managing and safeguarding something that is valuable to our whole community.

Incorporating Te Reo Māori with our name signals our commitment to Te Tiriti o Waitangi, and the work we're doing with Māori communities, our Whānau Ora partners and Māori health professionals to help them achieve the best possible health outcomes for Māori from funded medicines.

## CHOOSING THE TE REO EXPRESSION OF OUR IDENTITY

"The term was gifted to us by our Kaumātua, Bill Kaua ONZM, and the feedback we received reassured us that it embodies what PHARMAC is about, and the 'story' we want to tell," says Sarah Fitt.

"We adopted Te Pātaka Whaioranga after seeking feedback from Māori communities and healthcare professionals."

A pātaka has many literal and metaphorical associations in Te Reo Māori. It refers, literally, to the raised platform for food storage and protection of taonga, and is also a symbol of safeguarding of things that are precious to the community.

Within the PHARMAC context, the concept of the pātaka symbolises a solid and reliable structure safeguarding the continuous flow of supplies, such as medicines and medical devices, and it's our role to keep the flow constant and maintain availability for the benefit of all New Zealanders.

"Whaioranga, or the pursuit of wellbeing, is already reflected in the name of our Māori Responsiveness Strategy, Te Whaioranga, signaling the central importance of meeting the needs of Māori through our work. Altogether, the term Te Pātaka Whaioranga reflects that we are the guardians of the pātaka, with a role in replenishing and sustaining the wellbeing of whānau and all communities in Aotearoa New Zealand," says Sarah.

## ACCOMPANYING VISUAL IDENTITY

We've also updated the look and feel of PHARMAC's visual identity to reflect the concepts expressed by Te Pātaka Whaioranga.

The new design retains elements of our previous logo, to reflect continuity with our 25-year history and the confidence our communities have in it. The infinite double spiral motif also reinforces the theme of supplying medicines and medical devices to support the health and wellbeing of New Zealanders.

"The visual pattern that is part of our new identity takes inspiration from the decorated carved slabs of many pātaka around the country. Traditionally, carvings on pātaka signal the importance of the supplies being stored. Our unique design is our way of signaling the importance of our role in supporting better health outcomes for New Zealand," says Sarah.

# GROWING TE WHAIORANGA



ĀTENE ANDREWS  
& BILL KAUA ONZM

Our work to engage with and respond to the needs of Māori continues to evolve as we connect with Māori communities about important health issues.

A key focus this year has been engaging with communities to identify the health areas they consider most important – Hauora Arotahi, and working with our Whānau Ora Collective partners on initiatives to address these.

When we consider funding any medicine, our decision-making framework means we always include the potential benefits for Māori specifically.

But as we discuss in relation to our access equity work, making medicines available does not necessarily mean they will be used equally by all population groups.

We know that Māori are not currently accessing funded medicines at the same rate as others in New Zealand.

Working on ways to reverse this will be a crucial part of the wider work we've committed to undertaking to eliminate inequities in medicines access.

## TE WHAIORANGA – SUPPORTING MĀORI HEALTH PROFESSIONALS

PHARMAC is committed to tackling the inequities that potentially see Māori miss out on around one million prescriptions for medicines each year.

“It’s important that our health system is responsive to the needs of Māori, and growing both the number and the skills of Māori health professionals who work with our Māori communities is important if we are to achieve this,” says Ātene Andrews, Kaiwhakahaere Whakarata Māori at PHARMAC.

“PHARMAC has been supporting the development of key parts of the Māori health workforce,” says Ātene.



Hiwinui Heke Awards 2018 Winner Natalia Hunt ●

This year we celebrated 10 years of supporting the development of Māori health professionals who play a crucial role in helping whānau get the best health outcomes.

### HIWINUI HEKE MĀORI PHARMACY SCHOLARSHIPS

In March, three pharmacy students were awarded Hiwinui Heke Māori Pharmacy Student scholarships.

This was the 10th year of these awards, born out of a partnership between PHARMAC and Ngā Kaitiaki o Te Puna Rongoā o Aotearoa, the Māori Pharmacists Association.

Open to Māori pharmacy students studying towards their Bachelor of Pharmacy degree at either Auckland or Otago University, the scholarships are awarded based on above average academic results, participation in tikanga Māori activities, and an essay about a chosen kaupapa.

The scholarships are named after our first Māori pharmacist, Hiwinui Heke – Te Arawa-Ngai Te Rangi, Uenukukopako.

“It’s fitting that we honour the contribution of this influential leader and positive Māori health advocate by supporting future generations to follow in his footsteps,” says Ātene.

Over the ten-year history of the scholarship, 31 Māori pharmacy students have received Hiwinui Heke scholarships of up to \$10,000.

“The scholarships promote pharmacy as a viable and vibrant career for young Māori, so this year’s anniversary marked a long-term and ongoing commitment by PHARMAC to help develop the Māori health workforce.”

Recipients of the scholarships this year, who each received \$3,000 towards furthering their studies, were Anthony Raumati, Anja Mulder and Ellery Fruean.



2018 Tapuhi Kaitiaki Awards ●

### TAPUHI KAITIAKI

The inaugural Tapuhi Kaitiaki Awards were launched in August this year, at the Indigenous Nurses conference in Auckland.

These awards are a collaboration between PHARMAC and Tōpūtanga Tapuhi Kaitiaki o Aotearoa (the New Zealand Nurses Organisation) and Te Pōari o Te Rūnanga o Aotearoa, which represents the interests and concerns of Māori members of the organisation.

The Tapuhi Kaitiaki Awards recognise Māori nurses who are pursuing their studies, clinical practice and professional development while continuing to support the wellbeing of whānau, hapū and iwi.

“We were pleased with the quality of the applications for these inaugural awards,” says Alison Hill, Director of Engagement and Implementation at PHARMAC.

“All of the applicants painted a vivid picture of their understanding and commitment to serving their communities through their profession.”

“I was honoured to present awards to nine recipients and to learn more about the journey each of them is on. They each demonstrated strong connections and dedication to their whakapapa and community, while continuing to strive towards excellence in their studies or professional practice.”

“PHARMAC has enjoyed a long-standing relationship with Te Rūnanga, and we’re keen to continue to support the development of Māori nurses,” says Alison.

Recipients of the 2018 Tapuhi Kaitiaki awards, who each received \$2000 to \$2500 towards their studies, were Pauline Brennan, Awhina Dixon, Kelly McDonald, Ani Tomoana, Maria Briggs, Logan Murray, Grace Manawatu, Margaret Hand and Tiny Ranga.

# PACIFIC RESPONSIVENESS STRATEGY – ONE YEAR ON



In 2017, we embarked on a journey to improve the health of Pacific peoples living in New Zealand, with the launch of our Pacific Responsiveness Strategy.

One year on, we've built strong relationships throughout New Zealand's Pacific communities and the wider health sector, as a foundation for the important work that lies ahead. "This approach reflects our strategy, symbolised by the growth of a coconut tree – it's important to start by planting the seed and making the soil fertile for growth," says Fonomaaitu-Tuvalu Fuimaono, Pacific Adviser, PHARMAC.

"In this first stage of our work we have begun engaging with a wide range of people from Pacific pharmacists to non-Pacific clinicians and PHARMAC's own staff, as well as reaching out directly to mums, dads and kids from Pacific families."

## SUPPORTING THE PACIFIC PHARMACISTS' ASSOCIATION

Over 2018, we've supported the formation of New Zealand's first Pacific Pharmacists' Association.

"Pacific pharmacists have a crucial role to play in improving the health of Pacific people in New Zealand. They're at the frontline, working with communities every day to help them get the most out of their medicines," says Fonomaaitu-Tuvalu.

“We want to help Pacific pharmacists in this role so that Pacific peoples better understand the medicines they take, and how to use them effectively. It was a privilege to help support the development of the Pacific Pharmacists Association.”

The association began as a Facebook page set up by Wellington pharmacist Kasey Brown. With seed funding and other support from PHARMAC, the association is now a legal entity, focused on helping Pacific pharmacists provide the best service, improve relationships with the community and find other ways to positively influence the health of Pacific peoples.

“We look forward to working closely with the association and are keen for them to become trusted advisors, informing us on how to engage better with Pacific communities and supporting us to implement initiatives such as community outreach programmes,” says Fonomaaitu-Tuvalu.

## PASIFIKA FESTIVAL

In March this year, we teamed up with the Ministry of Health to attend Auckland’s iconic Pasifika Festival.

Supported by a team of doctors, nurses and pharmacists, we talked to thousands of people about the responsible use of medicines and answered their health-related questions.



Pasifika Festival ●

“Events such as the Pasifika Festival are an invaluable opportunity to engage directly with members of the Pacific community in an informal, face-to-face setting,” says Fonomaaitu-Tuvalu.

“We envisage this being the first of many events that PHARMAC will be represented at, making us more visible and accessible in the community, and helping build understanding of our role and provide robust health advice.”

## SEMINAR FOR CLINICIANS

One of PHARMAC’s important roles is promoting the responsible use of medicines and providing educational opportunities for clinicians is one of the ways we do this.

This year, we held our first-ever Pacific health seminar, focused on issues related to diabetes and child obesity.

“The seminar was designed to engage non-Pacific clinicians to better support their Pacific patients,” says Fonomaaitu-Tuvalu.

It was delivered by expert Pacific clinicians and researchers including Dr Debbie Ryan, principal of Pacific Perspectives, a health and education consultancy focused on improving outcomes for Pacific communities.



Launch of the Pacific Pharmacists Association ●

## STRENGTHENING INTERNAL CAPABILITIES

To better serve Pacific peoples, we recognise that we need to deepen our own awareness and understanding of Pacific cultures.

“Our Pacific Responsiveness Strategy therefore includes a focus on building the capabilities of our staff,” says Fonomaaitu-Tuvalu.

This year, we began doing this through initiatives such as Pacific cultural competency courses and celebrating events such as Pacific language weeks.

“We’re looking forward to the next phase of the strategy, which is about testing ways to improve health outcomes for Pacific peoples,” says Fonomaaitu-Tuvalu.

In the meantime, we’ll keep building relationships because as the Samoan proverb *E lē fālālā fua le /a’au* says, “the leaves of the coconut tree don’t just move on their own.” In other words, we need to work together to effect growth and change.

# INVOLVING CONSUMERS IN WHAT WE DO



Consumer voices review

We know that the work we do, and the decisions we make, directly affect New Zealanders.

We work hard to ensure New Zealanders get the best health outcomes we can achieve from within our fixed budget.

“A key principle of the PHARMAC model is that we make decisions that are evidence-based, and we consider a wide range of clinical, economic and commercial information to ensure we make balanced decisions. We seek this information from a range of sources including pharmaceutical suppliers, clinicians, other health professionals and consumers,” says Sarah Fitt.

“It’s important to us that people can have input into our decision-making. We also want it to be easy for people to see how and why we made a particular decision.”

This year, we carried out important work to identify what people think is working well in the way we currently engage, and what improvements we can make.

## HOW WE CONSULTED

We did a range of things to make sure we heard people’s views during May and June 2018.

We released a discussion document and short online survey that we promoted through social media. We also went out into communities and held meetings at various locations around the country.



# 66

## In response to the feedback we received we have developed an action plan and are underway with a number of process and system improvements 99

As well as our public engagement, we ran a workshop with our Consumer Advisory Committee. This is the group of external representatives who give us input from a patient or health consumer perspectives.

Last but not least, we canvassed the views of our own staff through a workshop and internal forums.

### SUMMARY OF FEEDBACK

We gathered a wide range of feedback from the consultation and other activities.

#### Some key themes were that people want:



more visibility of how consumers' views are taken into account



greater clarity around how consumers can have input into our funding processes



more information and rationale on why changes are sometimes made to the brand of medicines publicly funded

### PROPOSED NEXT STEPS

"In response to the feedback we received we have developed an action plan and are underway with a number of process and system improvements," says Sarah.

"This work is focused on improving the visibility and ease of access to information, exploring opportunities for consumers to have further input into funding decisions, and looking at how we can reduce the impact of brand changes on consumers."

Our consultation also highlighted that while some consumers have strong channels to voice their views and needs, such as advocacy and support groups, there are potentially many consumers who we don't currently hear from.

It's important to us that we understand the needs and views of consumers across the range of communities we serve. So, we are also planning work to help develop a more complete understanding of our consumers and how best to engage with them.

"This work is pivotal to making PHARMAC a more open and responsive organisation, as well as supporting the success of our work to eliminate access inequities," says Sarah.

# BEING BOLD

In 2017, we launched three ambitious goals to be achieved by 2025:

**eliminate**  
inequities in access  
to medicines

**generate**  
\$1 billion of savings  
from medical device  
management, to reinvest  
in health outcomes for  
New Zealanders

**create**  
systems that  
enable the best  
investment choices  
to be implemented  
across all PHARMAC  
activities.

Here's an update on some of the work that's underway towards these goals.

1

## Eliminate inequities in access to medicines

Not all New Zealanders are achieving best health outcomes from medicines funded by PHARMAC.

We know that Māori have significant barriers in accessing funded medicines, as do Pacific peoples. Deprivation and rurality are likely to be important factors too.

This year, through literature reviews and other feedback, we focused on identifying the key barriers to equitable medicines access. This was an important first step, as being clear about the drivers of inequity is crucial to developing effective solutions.

The five key barriers identified were:

- **availability** - how PHARMAC makes funding decisions so that everyone who is eligible can access funded medicines
- **affordability** - cost barriers mean people can't afford funded medicines
- **accessibility** - challenges getting to see a prescriber or to the pharmacy
- **acceptability** - the ability of health services to create trust, so patients are informed and engaged enough to accept the medicines they've been prescribed
- **appropriateness** - the adequacy and quality of prescribing to ensure equitable health outcomes

Some solutions to these barriers will be within PHARMAC's control - others will see us playing an influencing or supporting role.

Good partnerships will therefore be crucial to achieving our bold goal, so this year we also focused on building and strengthening the relationships we'll need to jointly tackle the drivers of medicines access inequity.

An example was teaming up with the Health Quality and Safety Commission (HQSC) to launch Whakakotahi 2019 – a challenge which calls on primary care providers to propose improvement projects, with successful applicants receiving support to implement their project.

Three of the projects that will be supported as part of the 2019 challenge will have a medicine access equity focus.

2

**Generate \$1 billion of savings from medical device management to reinvest in health outcomes for New Zealanders**

More medical devices used by DHBs were brought under national contracts this year, which means any DHB can purchase the contracted items under common terms for things like price, maintenance and supply.

We have a total of over 93,000 hospital medical device line items, from over 60 suppliers, listed in the Pharmaceutical Schedule. All contracting to date is expected to save \$55.41 million over 5 years.

As well as delivering immediate benefits to DHBs, the work we've been doing has also enabled us to keep deepening our understanding of the types of products currently in use across DHBs.

This is important, as the Government's decision to apply the PHARMAC management model to DHB hospital medical devices means we will eventually be responsible for deciding what devices are used or provided by DHBs – either within hospitals or the community.

In time, our approach to making device funding decisions will bear many similarities with the approach we currently use for medicines. For example, decisions will be based on our Factors for Consideration, which means we will assess the need, benefits, costs and savings and suitability of a particular device, including how these apply to the individual requiring treatment, their family/whanau and wider society, as well as the broader health system.

However, we also recognise that there are significant differences between medicines and devices. For example, some devices have unique servicing and maintenance requirements, so our approach to device funding decisions will be tailored to take these into account.

We're currently preparing to consult from March next year on the next step in our proposed approach to managing funding decisions for hospital medical devices.

This will mark a significant step forwards in our device management work, so we'll be engaging with DHBs early in the new year to raise awareness of the consultation. We want to encourage as much participation and feedback as possible to help shape our approach.

3

**Create systems that enable the best investment choices to be implemented across all PHARMAC activities**

Getting the best outcomes from the decisions we make depends on the right systems and processes being in place to support those decisions – not just within PHARMAC, but across the wider health sector too.

The work we're doing towards this goal therefore involves changing how we do things, and how we work with others, to achieve our goal of delivering the best health outcomes for New Zealanders.

This year saw a major change when the responsibility for managing expenditure on hospital medicines was transferred from DHBs to PHARMAC.

With hospital medicines now included in the Combined Pharmaceutical Budget (CPB), we have the ability to deliver even greater savings which can be reinvested in the health of New Zealanders.

Within PHARMAC, we're working on a new online system for the receipt of pharmaceutical funding applications and at the same time making it easier for people to track the status of an application.

# THERAPEUTIC GROUP REVIEW

## TOP 20 MEDICINES BY SPEND



Medicine	Gross Cost	Ranking
Adalimumab	\$83,130,000	1
Dabigatran	\$39,780,000	2
Trastuzumab	\$36,690,000	3
Varicella zoster virus (Oka strain) live attenuated vaccine (shingles vaccine)	\$29,150,000	4
Etanercept	\$28,860,000	5
Insulin glargine	\$28,110,000	6
Pneumococcal (PCV10) conjugate vaccine	\$27,750,000	7
Fluticasone with salmeterol	\$26,710,000	8
Pembrolizumab	\$23,590,000	9
Human papillomavirus (6, 11, 16, 18, 31, 33, 45, 52 and 58) vaccine (HPV)	\$23,550,000	10
Diphtheria, tetanus, pertussis, polio, hepatitis B and haemophilus influenzae type B vaccine	\$23,030,000	11
Abiraterone acetate	\$22,990,000	12
Lenalidomide	\$21,300,000	13
Budesonide with eformoterol	\$19,110,000	14
Rituximab	\$18,100,000	15
Bortezomib	\$14,630,000	16
Fingolimod	\$13,460,000	17
Blood glucose diagnostic test strip	\$13,190,000	18
Emtricitabine with tenofovir disoproxil fumarate	\$12,760,000	19
Epoetin alfa (erythropoietin alfa)	\$12,730,000	20

## TOP 20 MEDICINES BY PRESCRIPTION VOLUME



Medicine	Scripts	Ranking
Paracetamol	2,840,000	1
Omeprazole	1,370,000	2
Atorvastatin	1,340,000	3
Amoxicillin	1,240,000	4
Aspirin	1,220,000	5
Ibuprofen	1,070,000	6
Metoprolol succinate	960,000	7
Salbutamol	930,000	8
Cilazapril	810,000	9
Colecalciferol	760,000	10
Prednisone	690,000	11
Amoxicillin with clavulanic acid	670,000	12
Metformin hydrochloride	600,000	13
Zopiclone	580,000	14
Levothyroxine	580,000	15
Loratadine	560,000	16
Codeine phosphate	510,000	17
Cetirizine hydrochloride	500,000	18
Simvastatin	500,000	19
Flucloxacillin	470,000	20

## TOP 20 THERAPEUTIC GROUPS BY GROSS SPEND



Therapeutic group	Main use	2016 (\$m)	2017 (\$m)	2018 (\$m)	Ranking
Immunosuppressants	Autoimmune conditions, arthritis, transplant and biologics for cancer	\$162.3	\$192.1	\$216.9	1
Vaccinations	Vaccinations	\$98.2	\$97.4	\$131.1	2
Chemotherapeutic agents	Cancer	\$75.1	\$83.4	\$86.0	3
Diabetes	Diabetes	\$50.6	\$53.9	\$57.5	4
Antithrombotic agents	Stopping blood clots	\$63.5	\$53.0	\$56.0	5
Inhaled long-acting beta-adrenoceptor agonists	Asthma	\$55.4	\$53.0	\$55.8	6
Anti-epilepsy drugs	Epilepsy	\$33.9	\$35.5	\$37.5	7
Antipsychotics	Mental health (psychoses)	\$33.3	\$35.7	\$37.0	8
Endocrine therapy	Hormone therapy	\$28.2	\$32.0	\$35.9	9
Antiretrovirals	HIV/AIDS, viral infections	\$25.4	\$27.8	\$30.5	10
Multiple sclerosis treatments	Multiple sclerosis	\$20.2	\$24.6	\$28.4	11
Antivirals	Viral infections	\$22.1	\$23.4	\$28.1	12
Anticholinergic agents	Allergies	\$18.4	\$18.6	\$22.7	13
Diabetes management	Blood glucose monitors	\$19.1	\$20.6	\$22.2	14
Analgesics	Pain relief	\$20.4	\$19.2	\$18.1	15
Treatments for substance dependence	Addiction	\$15.2	\$14.9	\$16.3	16
Oral supplements/complete diet (nasogastric/gastrostomy tube feed)	Special food	\$10.8	\$13.0	\$15.7	17
Antibacterials	Bacterial infections	\$14.2	\$13.9	\$13.5	18
Antianaemics	Anaemic conditions	\$12.3	\$12.5	\$13.0	19
Agents affecting the renin-angiotensin system	Blood pressure, heart failure, kidney failure and effects of diabetes	\$12.3	\$11.8	\$12.3	20

# THERAPEUTIC GROUP SUMMARIES

## RESPIRATORY/ASTHMA

Spending: **+3%**

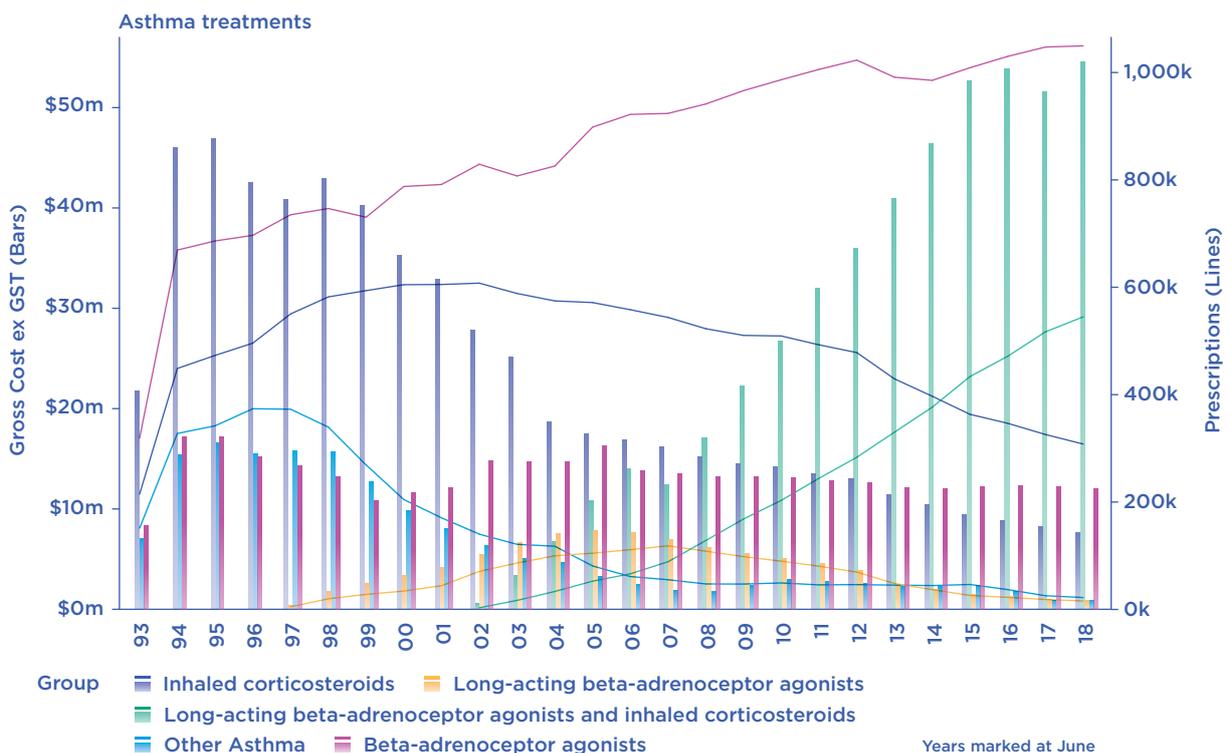
Usage: **0%**

New Zealand has one of the highest rates of childhood asthma in the world.

The biggest contributor to these high rates of asthma is that Māori and Pacific children have greater prevalence and severity of asthma symptoms than other population groups.

As expected, asthma treatments continue to feature in our top medicines for both prescriptions and spending.

This year, we removed the Special Authority criteria for montelukast and tiotropium, allowing over 20,000 more people access to these treatment options.



## NERVOUS SYSTEM

Gabapentin and pregabalin are used to treat neuropathic pain and some forms of epilepsy.

We already had gabapentin listed for people with epilepsy, neuropathic pain or pruritus related to chronic renal failure.

A commercial process resulted in funding both gabapentin and pregabalin without restrictions, with savings of \$9.6 million.

Gabapentin accounted for approximately 53,000 Special Authority applications annually, the highest of any pharmaceutical. Removing the Special Authority has therefore significantly reduced the administrative burden for health professionals.

## CARDIOVASCULAR

Statins Spending: **-17%**

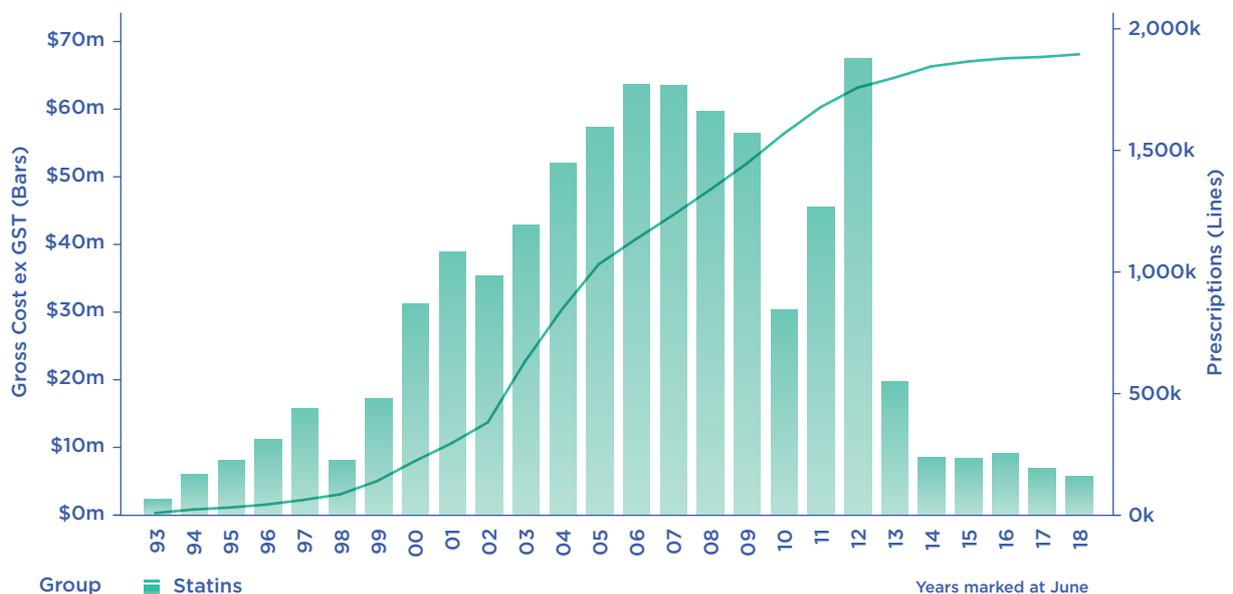
Statins Usage: **+1%**

Access was widened for primary arterial hypertension (PAH) treatments, and we made it easier for clinicians to apply for funding.

We removed the requirement for a panel application from some PAH treatments and allowed earlier initiation, quicker access to dual therapy and the addition of triple therapy for some patients.

We also made epoprostenol available in the community, and started funding rivaroxaban, without restriction.

Rivaroxaban is an oral anti-coagulant, generally used for the prevention of stroke and other thromboembolic events. It provides an additional option for those patients unable to take the currently funded treatments.



# CANCER AND IMMUNOSUPPRESSANTS

Cancer treatments Spending: **+16%**

Cancer treatments Usage: **+1%**

Over the past year, four more cancer treatments have been funded:

- Cetuximab, for people with head and neck cancer - benefiting an estimated 40-50 patients per year.
- Bendamustine, for chronic lymphocytic leukaemia (30-35 patients) and indolent, low-grade lymphomas (130 patients).
- Pemetrexed, for people with mesothelioma (40-50 patients) which is primarily caused by inhalation of asbestos. Pemetrexed is also funded for non-small cell lung cancer (up to 400 first-line patients, and up to 50 second-line patients). This is the most common type of lung cancer in New Zealand, with the majority of patients presenting with advanced disease at diagnosis.
- Zoledronic acid, a treatment for post-menopausal women with early breast cancer that prevents the disease spreading into bones. Up to 3000 women per year could benefit from this decision.

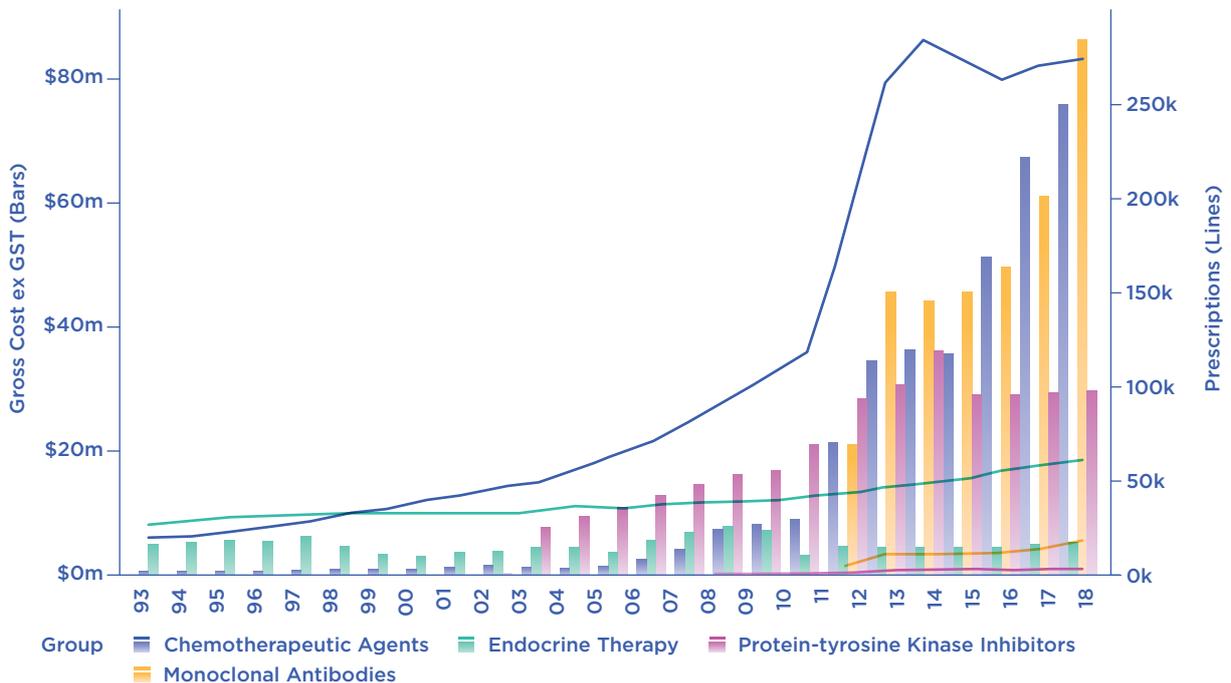
Over 83,000 people accessed cancer medicines during the year. A total of \$220M (gross) was spent on cancer medicines, accounting for 15.4% of the total CPB spend.

We spent the most on:

- Trastuzumab (Herceptin) for breast cancer
- Pembrolizumab for advanced melanoma
- Abiraterone acetate for prostate cancer
- Lenalidomide for multiple myeloma
- Rituximab for leukaemia/blood cancer

We started funding nivolumab (Opdivo) and pembrolizumab (Keytruda) for people with advanced melanoma in 2016. 256 new patients in 2018 received one of these melanoma treatments, at a cost of \$27 million, bringing the total number treated since 2016 to 609.

Immunosuppressants continue to feature in our highest cost medicines. We spent over \$83 million (gross) on adalimumab last year, and almost \$29 million (gross) on etanercept. These medicines are mainly used to treat autoimmune disorders including a number of types of arthritis.



Years marked at June

# MENTAL HEALTH

Antidepressants spending: **-34%**

Antidepressants usage: **+3%**

Antipsychotics spending: **+4%**

## Moving 40,000-plus people to a new brand of venlafaxine this year was challenging.

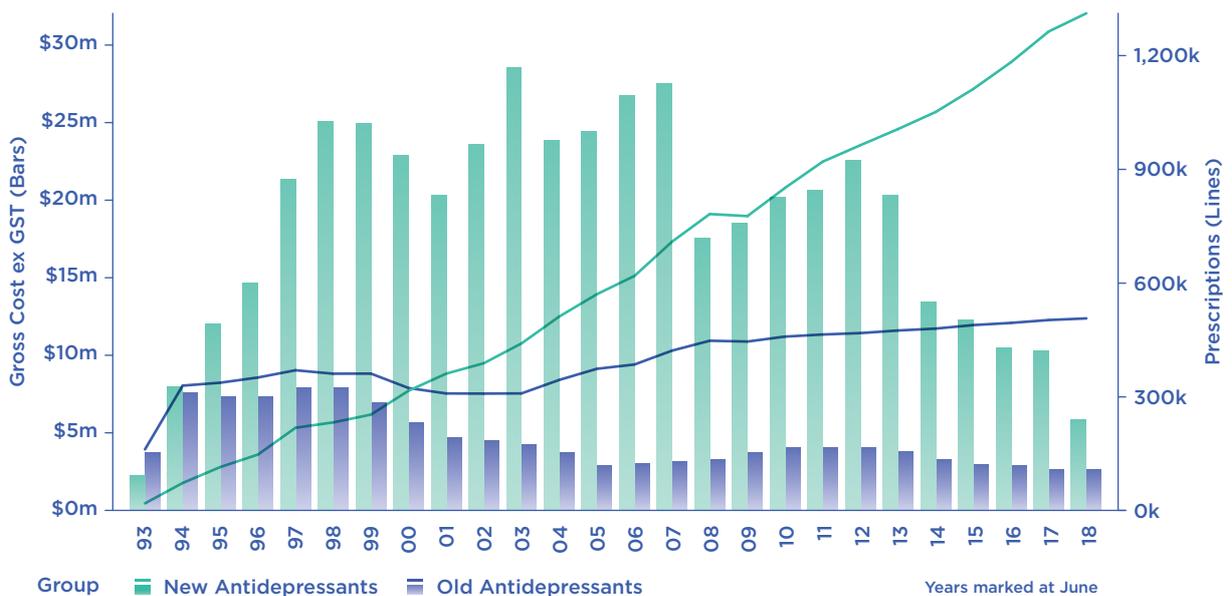
With this brand change, PHARMAC took the opportunity to provide additional education and support. We launched an online learning module aimed at health professionals, to help them communicate the change to their patients. So far, more than 600 health professionals (doctors, nurses, pharmacists) have accessed the module.

We also worked with Auckland University to study the venlafaxine brand change. 310 people participated in the study using an online questionnaire. The study looked at peoples' preferences and perceptions, side effect reporting and perceived efficacy of the new brand.

The study also looked at the role of trust in pharmaceutical companies (suppliers). The results will help us better understand the brand change experience for people and inform our future approach in this type of situation.

A request for proposals (RFP) for the second-generation (atypical) antipsychotic medicine aripiprazole resulted in a new brand of the medicine being funded and removal of the Special Authority criteria, with savings of \$4.2 million.

Aripiprazole is used for treating schizophrenia and bipolar disorder. The brand change to Aripiprazole Sandoz allows more people to access this treatment and means that aripiprazole can now be used as a first-line treatment option.



*i* New antidepressants include selective serotonin re-uptake inhibitors, mirtazapine and venlafaxine  
 Old antidepressants include cyclic and related agents and monoamine-oxidase inhibitors

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## ALIMENTARY TRACT AND METABOLISM

### PHARMAC removed the Special Authority from macrogol 3350, a treatment for constipation.

This decision was following advice from the Gastrointestinal Subcommittee of the Pharmacology and Therapeutics Advisory Committee (PTAC) that macrogol 3350 was at least as clinically effective as lactulose and potentially better tolerated. An estimated 90,000 more people can now access this treatment.

Intravenous ferric carboxymaltose is now a potential option for treating patients with iron deficiency anaemia in the community.

We had previously listed this treatment in hospitals only. While we acknowledge that the provision of infusion services in the community varied, we felt it was important to remove any barriers to community access that we were in control of – namely the absence of funding of the treatment in the community setting.

PHARMAC will continue to engage with the health sector around developing a community-based claiming and reimbursement model for pharmaceuticals delivered via primary care.

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## DIABETES

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Spending: **+7%**

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### A new sole supply arrangement with Pharmaco resulted in listing an expanded range of CareSens blood glucose diagnostic test meters and testing strips.

The listing of the CareSens Dual, which tests for both glucose and ketones, means more people can access blood ketone testing products.

As some products were being delisted, 15,000 people needed to upgrade their current CareSens meter and a further 3,000 people needed to change from their current brand of meter to a CareSens.

People with Type I diabetes could choose to upgrade to a CareSens Dual. A six-month transition period was provided for the changeover. During this time, we allowed pharmacists to change meters and removed the co-payment for a new meter.

# INFECTIONS

Antiviral treatments spending: **-32%**

Antiviral treatments usage: **+7%**

Antibacterial treatments spending: **-3%**

Antibacterial treatments usage: **-1%**

## PRE-EXPOSURE PROPHYLAXIS FOR HIV (PrEP)

New Zealand became one of the first countries in the world to fund pre-exposure prophylaxis (or PrEP) treatment for HIV (human immunodeficiency virus).

PHARMAC took this step in helping control the spread of HIV by widening access to Truvada as a preventative medicine for high risk individuals.

Widening access to Truvada will benefit up to 4000 people each year. After years of declining HIV infection rates, that trend has recently reversed and is now increasing. We expect that funding PrEP will significantly reduce HIV transmission rates in New Zealand.

## HEPATITIS C

PHARMAC started funding new treatments for Hepatitis C in 2016 which give people the chance of a hepatitis C cure in as little as 12 weeks of treatment. Over 1100 more people have been treated over the last year, bringing the total number treated to over 2300 people.

An estimated 50% of people who have hepatitis C don't know they have it. We are continuing to work with the health sector to find ways to identify and treat even more people in general practice and primary care.

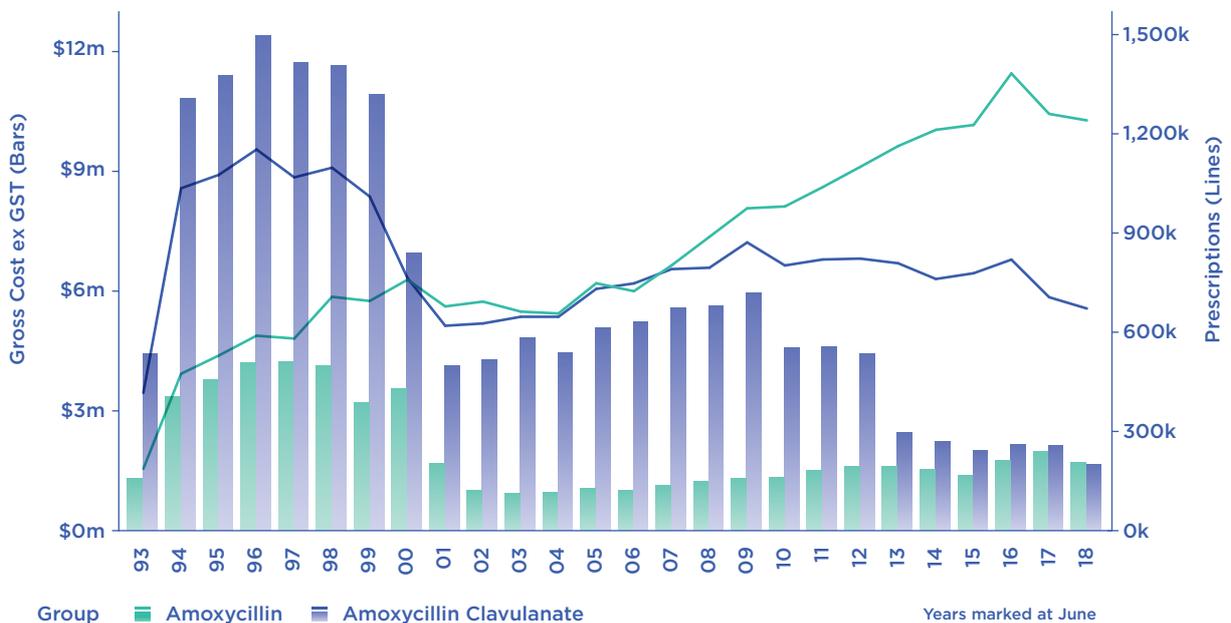
We are also working towards funding a pangenotypic treatment so that all people with chronic hepatitis C can access a funded treatment, regardless of disease genotype.

## RESPONSIBLE USE OF ANTIBIOTICS

Along with providing new antimicrobial treatments, we are also responsible for ensuring the ones we already fund are used responsibly.

We ran a "Keep antibiotics working" campaign this year, to coincide with the traditional months of the winter flu season.

Overusing antibiotics, especially when they're not needed, is contributing to antibiotic resistance. This is a global health threat, and we all need to help keep antibiotics working. We can help reduce antibiotic resistance by only using antibiotics when they are needed.



# VACCINES

Spending: **+35%**

## INFLUENZA VACCINE

For the first time in New Zealand, a quadrivalent influenza vaccine was supplied for the 2018 flu season. A quadrivalent influenza vaccine provides protection against four strains of influenza (two Influenza A and two influenza B strains).

The quadrivalent vaccine is expected to provide broader protection by containing an additional B strain.

**1.3 million doses of influenza vaccine have been distributed this year, an all-time high.**

## SHINGLES VACCINE

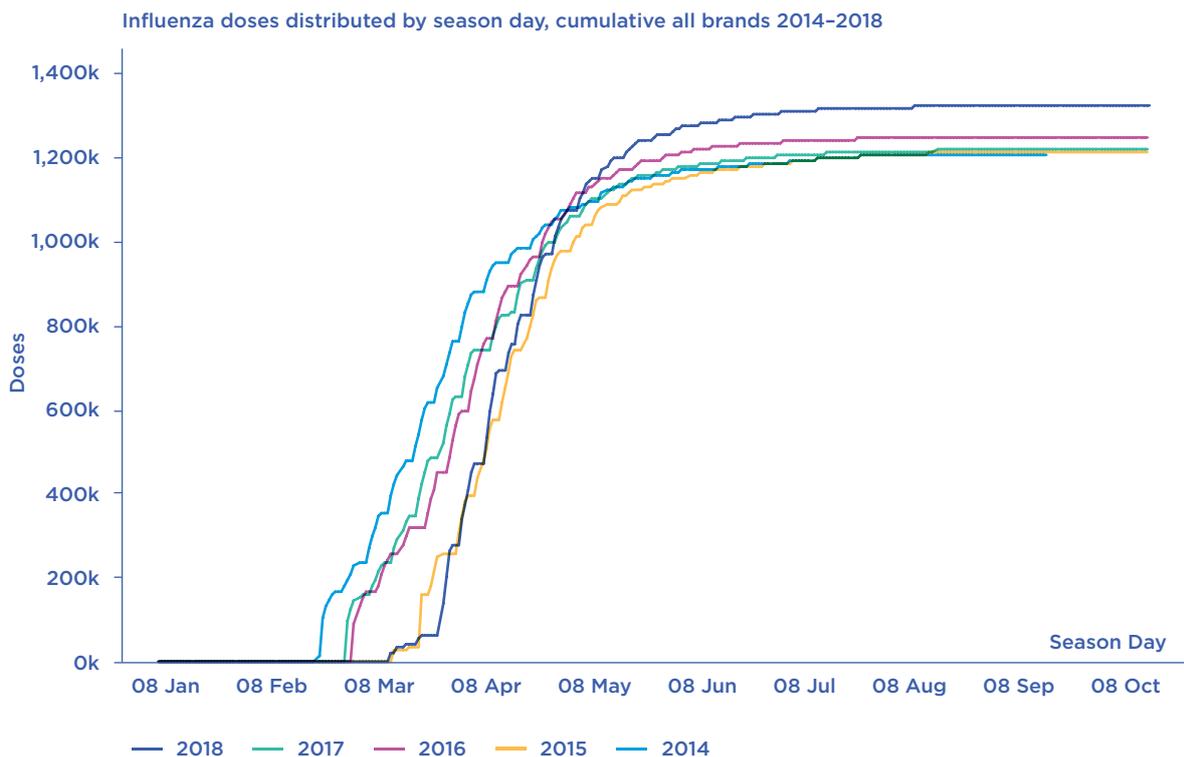
One in every three people can expect to suffer at least one attack of shingles in their lifetime. Older people and those who are immunocompromised are more susceptible to shingles.

We were pleased to be able to fund the shingles (Zoster) vaccine for 65-year olds, with a catch-up programme that will run for two years for people aged 66-80. Around 600,000 people will be eligible for this vaccine.

Shingles can be very painful, prolonged and debilitating, so preventing shingles will reduce the impact of this disease in our older people.

In the first three months since listing, more than 190,000 people received a funded shingles vaccine.

This was one of two vaccines that became widely available during the year. The other was for people at the other end of the age spectrum, with our decision to widen access to the chickenpox vaccine.



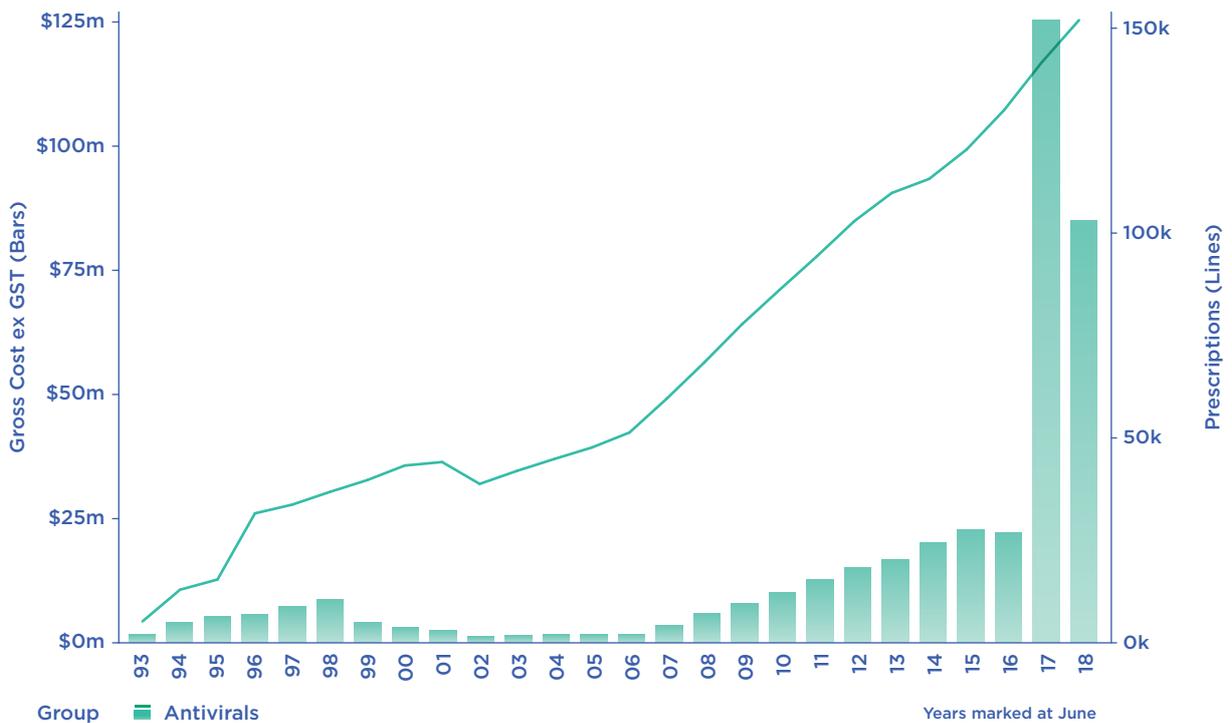
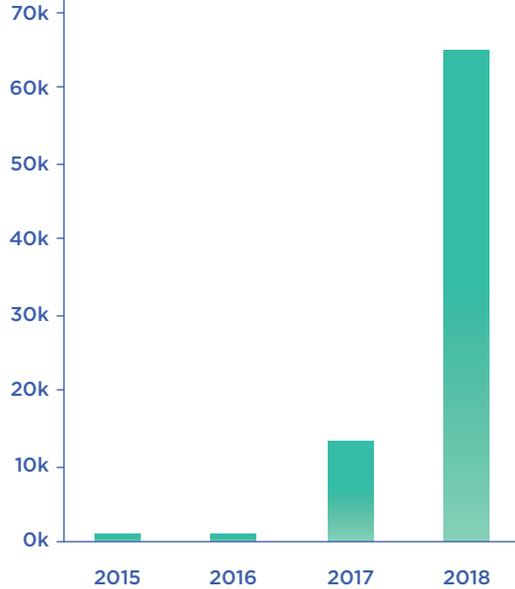
### CHICKENPOX VACCINE

PHARMAC extended funding of the varicella vaccine which prevents chickenpox. Chickenpox causes a prominent rash, itchiness and feelings of ill-health, and can cause scarring and complications that require hospital treatment.

Around 60,000 children are born in New Zealand each year. One dose is now funded for children at 15 months. A dose can be provided at 11 years for those who have never been infected with the varicella virus or had the vaccine previously.

We expect that funding the vaccine will lead to a reduction in GP and emergency department visits, and in hospitalisations. Varicella vaccine was initially listed only for high-risk individuals. With the extended funding, more than 80,000 people have now been vaccinated with the funded vaccine.

Varicella Vaccine Totals



*i* Antivirals includes all medicines in the antivirals TG2 group including emtricitabine with tenofovir disoproxil fumarate.

# MUSCULOSKELETAL

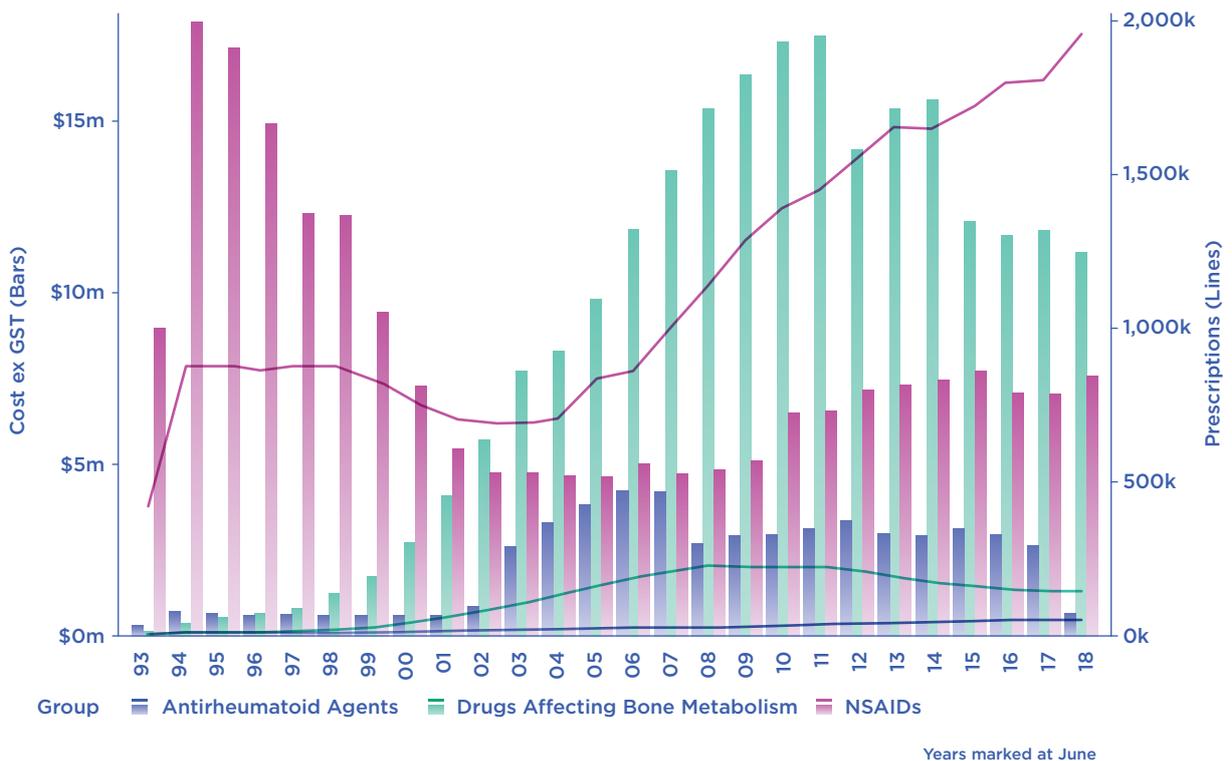
Spending: **-76%**

Usage: **+4%**

PHARMAC provided another treatment option for people with severe osteoporosis.

Osteoporosis can cause bone fractures which can significantly affect quality of life. Funding denosumab will not only help people with osteoporosis, but also reduce the burden on carers as well.

More than 3000 people over three years are expected to benefit from denosumab.



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## SENSORY

We started funding two new eye treatments that could prevent blindness.

Aflibercept (Eylea) is a newer generation anti-VEGF treatment to preserve and improve vision. It is expected to benefit around 900 people with a range of ophthalmic conditions, including wet age-related macular degeneration and diabetic macular oedema (DMO). DMO is a serious complication of type 1 and 2 diabetes that can cause blindness if untreated.

We also listed dexamethasone implants, providing another treatment option for people with DMO.

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## BLOOD

Intravenous fluid bags and a range of irrigation solutions (collectively referred to as bulk fluids) have diverse indications and are used in almost every area of DHB hospitals.

It was important to encourage competition in this area as approximately 3.1 million intravenous fluid bags and 700,000 packs of irrigation fluids are used in DHB hospitals each year.

PHARMAC ran a procurement process and established a temporary advisory group of experts to provide specialist clinical advice to assist with the assessment and development of proposals. The process resulted in a large number of brand changes and delistings. We awarded contracts to five suppliers that will help to increase competition and future savings in this area.

PHARMAC also widened access to rivaroxaban, an anticoagulant used for preventing strokes and for preventing or treating blood clots. Widening access to this medication could benefit up to 12,000 people in the first year of funding.

# DIRECTORY

## PHARMACOLOGY AND THERAPEUTICS ADVISORY COMMITTEE (PTAC)

Prof Mark Weatherall (Chair, geriatrician) BA, MBChB, MAppStats, FRACP

Dr Marius Rademaker (Deputy Chair, dermatologist) BM (Soton), MRCP (UK), JCHMT

Accreditation, DM, FRCP (Edin), FRACP

Dr Melissa Copland (pharmacist) PhD, BPharm(Hons), RegPharmNZ, FNZCP

Assoc. Prof Alan Fraser (gastroenterologist) MB, ChB, MD, FRACP

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Dr Giles Newton-Howes (psychiatrist) BA, BSc, MBChB, MRCPsych, PostDip BD, FRANZCP

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Dr Matthew Strother (medical oncologist) MD (USA), FRACP

Dr Jane Thomas (paediatric anaesthetist) MB ChB, FANZCA, FFPANZCA

Dr Simon Wynn Thomas BMedSci (UK), MRCP (UK), MRCGP (UK), DFFP, FRNZCGP

Dr Ian Hosford (psychogeriatrician) MBChB, FRANZCP

## PTAC SUBCOMMITTEES

### Analgesic

Dr Jane Thomas (Chair, PTAC, paediatric anaesthetist), Dr Tipu Aamir (pain medicine specialist), Dr Rick Acland (rehabilitation specialist), Prof Brian Anderson (paediatric anaesthetist/intensivist), Dr Christopher Jephcott (anaesthetist), Dr Christopher Lynch (neurologist), Dr Giles Newton-Howes (psychiatrist), Dr Howard Wilson (general Practitioner/pharmacologist).

### Anti-infective

Dr Sean Hanna (Chair, PTAC, General Practitioner), Dr Graham Mills (infectious disease physician), Dr Emma Best (paediatric infectious diseases consultant), Dr Simon Briggs (infectious diseases physician), Dr Steve Chambers (clinical director/infectious disease physician), Dr James Chisnall (general practitioner), Prof. Ed Gane (hepatologist), Dr Tim Matthews (general physician), Dr Jane Morgan (sexual health physician),

Dr Nigel Patton (Haematologist), Dr Anja Werno (medical director microbiology) Dr Howard Wilson (general practitioner/pharmacologist).

### Cancer treatments (CaTSoP)

Dr Marius Rademaker (Chair, PTAC, dermatologist), Dr Scott Babington (radiation oncologist), Dr Peter Ganly (haematologist), Dr Tim Hawkins (haematologist), Dr Richard Isaacs (medical oncologist), Dr Allannah Kilfoyle (haematologist) Dr Anne O'Donnell (medical oncologist), Dr Matthew Strother (medical oncologist, PTAC), Dr Lochie Teague (paediatric haematologist/oncologist), Dr Jonathon Adler (palliative medicine specialist), Dr Michelle Wilson (medical oncologist).

### Cardiovascular

Prof Tim Stokes (Chair, PTAC), Dr Andrew Aitken (cardiologist), Dr John Elliott (cardiologist), Prof Jennifer Martin (PTAC, clinical pharmacologist), Dr Richard Medicott (general practitioner), Dr, Dr Mark Simmonds (cardiologist), Dr Martin Stiles (cardiologist), Prof. Mark Webster (consultant cardiologist).

### Dermatology

Dr Melissa Copland (Chair, PTAC, pharmacist), Ms Julie Betts (wound care nurse), Dr Dr Martin Denby (general practitioner), Dr Paul Jarrett (dermatologist), Dr Sharad Paul (general practitioner), Dr Diana Purvis (dermatologist/paediatrician), Dr Marius Rademaker (PTAC, dermatologist).

### Diabetes

Dr Sean Hanna (Chair, PTAC, general practitioner), Dr Melissa Copland (pharmacist), Dr Nic Crook (diabetologist), Dr Helen Lunt (adult diabetes specialist), Dr Diana McNeill (general physician/diabetes specialist), Dr Bruce Small (general practitioner), Ms Kate Smallman (diabetes nurse specialist/prescriber), Dr Esko Wiltshire (paediatric endocrinologist).

### Endocrinology

Dr Simon Wynn Thomas (Chair, PTAC, general practitioner), Dr Anna Fenton (endocrinologist), Assoc Prof Andrew Grey (endocrinologist, adult), Prof Alistair Gunn (paediatric endocrinologist), Dr Stella Milsom (endocrinologist), Dr Bruce Small (general practitioner), Dr Jane Thomas (PTAC, paediatric anaesthetist), Dr Esko Wiltshire (Paediatric Endocrinologist).

### Gastrointestinal

Assoc. Prof. Alan Fraser (Chair, PTAC, gastroenterologist), Dr Murray Barclay (clinical pharmacologist/gastroenterologist),

Dr Simon Chin (paediatric gastroenterologist), Dr Sandy Dawson (general practitioner), Assoc. Prof. Michael Schultz (gastroenterologist), Assoc. Prof. Catherine Stedman (gastroenterologist/hepatologist and clinical pharmacologist), Dr Russell Walmsley (gastroenterologist), Dr Simon Wynn Thomas (Chair, PTAC, general practitioner).

### Haematology

Prof Mark Weatherall (Chair, PTAC, geriatrician), Prof John Carter (haematologist), Dr Nyree Cole (paediatric haematologist), Dr Paul Harper (haematologist), Dr Tim Hawkins (haematologist), Assoc Prof Paul Ockelford (haematologist), Dr Nigel Patton (haematologist).

### Immunisation

Dr Stuart Dalziel (Chair, PTAC, paediatrician), Assoc Prof Cameron Grant (Assoc. Prof. in paediatrics), Dr Sean Hanna (PTAC, general practitioner), Prof Karen Hoare (nurse practitioner/senior lecturer), Assoc Prof Lance Jennings (clinical virologist), Dr Osman Mansoor (public health physician/Medical Officer of Health), Dr Gary Reynolds (general practitioner), Dr Michael Tatley (director of New Zealand Pharmacovigilance Centre) Assoc Prof Nikki Turner (director of Immunisation Advisory Centre), Dr Ayesha Verrall (adult infectious diseases specialist), Dr Tony Walls (paediatrician/infectious diseases specialist), Dr Elizabeth Wilson (paediatric infectious diseases specialist).

### Mental Health

Dr Sean Hanna (Chair, PTAC, general practitioner), Dr David Chinn (child and adolescent psychiatrist), Dr Ian Hosford (psychogeriatrician), Dr Verity Humberstone (psychiatrist), Dr Jeremy McMinn (consultant psychiatrist addiction specialist), Assoc Prof David Menkes (psychiatrist), Dr Giles Newton-Howes (PTAC, psychiatrist), Dr Cathy Stephenson (general practitioner/sexual assault medical examiner).

### Nephrology

Dr Jane Thomas (Chair, PTAC, paediatric anaesthetist), Assoc Prof John Collins (renal physician), Dr Nick Cross (nephrologist), Dr Malcom Dyer (general practitioner), Dr Maggie Fisher (specialist/renal physician), Dr Colin Hutchison (nephrologist), Assoc Prof Helen Pilmore (renal physician), Dr Richard Robson (clinical pharmacologist, consultant physician in nephrology), Dr William Wong (Director, Dept of Nephrology).

### Neurological

Prof Mark Weatherall (Chair, PTAC, geriatrician), Dr John Fink (neurologist), Dr Richard Hornabrook (general practitioner), Dr Ian Hosford (psychogeriatrician), Dr John Mottershead (neurologist), Dr Giles Newton-Howes (psychiatrist), Dr Ian Rosemergy (neurologist), Dr Paul Timmings (neurologist).

### Ophthalmology

Dr Stephen Munn (Chair, PTAC), Dr Marius Rademaker (PTAC, dermatologist), Mr Peter Grimmer (optometrist), Dr Malcolm McKellar (ophthalmologist), Dr Jo Sims (ophthalmologist), Dr David Squirrell (ophthalmologist).

### Rare Disorders

Prof Tim Stokes (Chair, PTAC, general practitioner), Dr Melissa Copland (PTAC, pharmacist), Prof Carlo Marra (dean of the school of pharmacy, University of Otago), Dr Dylan Mordaunt (clinical geneticist), Dr Humphrey Pullon (haematologist), Dr Howard Wilson (general practitioner), Dr James Cleland (neurologist and neurophysiologist), Dr Janice Fletcher (clinical geneticist and metabolic physician), Dr William Wong (paediatric nephrologist)

### Reproductive and Sexual Health

Dr Melissa Copland (Chair, PTAC, pharmacist), Dr Mira Harrison-Woolrych (obstetrician and gynaecologist), Dr Debbie Hughes (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), Simon Wynn Thomas (general practitioner).

### Respiratory

Dr Stuart Dalziel (Chair, PTAC, paediatrician), Dr Tim Christmas (respiratory physician), Dr Andrew Corin (general practitioner), Dr Greg Frazer (respiratory physician), Dr David McNamara (paediatric respiratory physician), Dr Ian Shaw (paediatrician), Prof Tim Stokes (professor of general practice), Dr Justin Travers (respiratory physician).

### Rheumatology

Dr Marius Rademaker (Chair, PTAC, dermatologist), Dr Priscilla Campbell-Stokes (paediatrician), Dr Keith Colvine (rheumatologist and general physician), Dr Michael Corkill (rheumatologist), Assoc Prof Alan Fraser (PTAC, gastroenterologist), Assoc Prof Andrew Harrison (rheumatologist), Dr Janet Hayward (general physician), Dr Haseena Hussain (general practitioner), Prof Lisa Stamp (rheumatologist), Assoc Prof Will Taylor (rheumatologist).

### Special Foods

Dr Stuart Dalziel (Chair, PTAC, paediatrician), Dr Simon Chin (paediatric gastroenterologist), Mrs Kim Herbison (paediatric dietitian), Mrs Julie Hollingsworth, Dr Jan Sinclair (paediatric allergy and clinical immunologist), Dr Russell Walmsley (gastroenterologist), Ms Victoria Woollett (community dietitian).

## Tender Medical

Dr Melissa Copland (Chair, PTAC, pharmacist), Ms Laura Clunie (hospital pharmacist), Dr Ben Hudson (general practitioner), Craig MacKenzie (hospital pharmacist), Dr John McDougall (anaesthetist), Clare Randall (palliative care clinical pharmacist), Geoff Savell (pharmacist), Dr David Simpson (haematologist), Ms Amanda Stanfield (community pharmacist), Prof Tim Stokes (professor of general practice), Helen Topia (nurse practitioner/clinical educator), Lorraine Welman (chief pharmacist).

## Transplant Immunosuppressant

Dr Marius Rademaker (Chair, PTAC, dermatologist), Dr Helen Evans (paediatric hepatologist/gastroenterologist), Dr Peter Ganly (haematologist), Dr Tanya McWilliams (respiratory physician), Dr Stephen Munn (PTAC, transplant surgeon), Dr Grant Pidgeon (renal physician), Dr Richard Robson (nephrologist), Dr Peter Ruygrok (Cardiologist).

## ADVISORY GROUPS

### Interventional Cardiology

Dr Scott Harding (Chair, interventional cardiologist), Dr Seif El-Jack (interventional cardiologist), Dr Sandi Graham (cardiology interventional nurse rep), Dr Barry Kneale (interventional cardiologist), Dr Madha Menon (interventional cardiologist), Dr Rajesh Nair (structural interventional cardiologist), Dr David Smyth (structural interventional cardiologist), Dr Mark Webster (structural interventionalist), Dr Gerard Wilkins (interventional cardiologist), Dr Nigel Wilson (paediatric cardiologist).

### Wound Care

Julie Betts (Chair, wound care nurse practitioner), Alan Shackleton (nurse consultant - wound care service clinical lead), Amanda Pagan (wound care specialist nurse), Catherine Hammond (wound care clinical nurse specialist & educator), Emil Schmidt (nurse specialist wound care), Jonathan Heather (plastic surgeon), Susie Wendelborn (specialty clinical nurse wound care), Wendy Mildon (clinical nurse specialist wound care).

## CONSUMER ADVISORY COMMITTEE (CAC)

### Chair

David Lui - Pacific Health Consultant, Mental Health Foundation of NZ Board member, Auckland

### Deputy Chair

Stephanie Clare - Chief Executive, Age Concern NZ, Wellington

### Members

Key Frost - Mental Health Advocate, Invercargill  
Francesca Holloway - Northern Regional Manager of Arthritis New Zealand, Auckland

Lisa Lawrence - Kaiwhakahaere, Motueka Family Service Centre, Nelson

Te Ropu Poa - General Manager of Te Hau Ora O Ngāpuhi, Kaikohe

Tuiloma Lina Samu - Pacific Health Advocate, Auckland

Adrienne von Tunzelmann - Board member, Age Concern NZ and Osteoporosis NZ, Tauranga

Neil Woodhams - Vice President, Multiple Sclerosis NZ, Auckland.

## PANELS

### Named Patient Pharmaceutical Assessment

**Advisory:** Dr George Laking (Chair, oncologist), Dr Paul Timmings (Deputy Chair, neurologist), Dr Christina Cameron (consultant general physician and clinical pharmacologist), Dr Rachel Webb (paediatric infectious disease physician), Dr Malcolm Dyer (general practitioner), Dr Dylan Mordaunt (clinical geneticist), Dr John Mottershead (consultant neurologist), Dr Paul Ockelford (clinical haematologist), Dr Nina Sawicki (general practitioner), Dr Janet Titchener (general practitioner), Dr Justin Travers (general and respiratory physician).

**Cystic Fibrosis:** Dr Cass Byrnes (respiratory paediatrician), Dr Ian Shaw (paediatrician), Dr Mark O'Carroll (respiratory physician), Dr Richard Laing (respiratory physician).

**Gaucher Treatment:** Dr Ian Hosford (Chair, consultant psychogeriatrician), Dr Colin Chong (radiologist), Dr Callum Wilson (metabolic consultant), Dr Tim Hawkins (haematologist).

**Haemophilia Treatments:** Dr Ian Hosford (Chair, consultant psychogeriatrician), Dr Nyree Cole (paediatric haematologist), Dr Paul Harper (haematologist), Dr Paul Ockelford (haematologist), Dr Julia Philips (haematologist), Brian Ramsay (specialist haemophilia nurse).

**Hepatitis C Treatment:** Prof Ed Gane (hepatologist), Prof Catherine Stedman (gastroenterologist and clinical pharmacologist), Dr Campbell White (consultant physician and gastroenterologist), Dr Jeffrey Wong (gastroenterologist), Sarah Fitt (Chief Executive, PHARMAC).

**Multiple Sclerosis Treatment Assessment:** Dr Ernie Willoughby (Chair, neurologist), Dr Neil Anderson (neurologist), Dr Alan Wright (neurologist), Dr David Abernethy (neurologist), Dr John Mottershead (neurologist)

**Pulmonary Arterial Hypertension:** Dr Howard Wilson (general practitioner/pharmacologist), Dr Andrew Aitken (cardiologist), Dr Clare O'Donnell (paediatric congenital cardiologist), Dr Ken Whyte (respiratory physician), Dr Lutz Beckert (respiratory physician).



# PHARMAC

TE PĀTAKA WHAIORANGA

If you are interested in working for PHARMAC  
please register on our careers site  
[www.careers.pharmac.govt.nz](http://www.careers.pharmac.govt.nz)

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