Medicines New Zealand believes New Zealanders deserve better access to medicines when they need them. Coming last out of 20 comparable OECD countries for access to new and innovative medicines reflects a harsh reality – New Zealand is a first world nation with second-rate access to leading health interventions.

Medicines are an important part of the overall health equation for New Zealand. Our aging population and increase of chronic diseases mean rapidly rising healthcare costs. We believe continuous investment in the best medicines when patients need them is crucial in helping the Government better manage healthcare solutions and costs.

Government, industry, and New Zealanders should be in partnership to ensure we can have longer and healthier lives.

Message from the Chair

New Zealanders deserve the right medicines at the right time.

Hon Heather Roy
Medicines New Zealand Chair
Benefits of innovative medicines

New Zealand’s total health expenditure is relatively high. But proportionally, expenditure on medicines per capita is relatively low.

New Zealand’s health expenditure compared to the rest of the world based on OECD data and health spend per capita (USD)

$ = per capita USD

- **$ 588** for NZ
- **$ 771** for Canada
- **$ 555** for Denmark
- **$ 531** for Australia
- **$ 655** for Italy
- **$ 307** for Ireland
- **$ 395** for Norway

Innovative medicines contribute to an increase in life expectancy*

In 9 years, innovative medicines contributed to increased life expectancy by nearly 2 years.

<table>
<thead>
<tr>
<th>Year</th>
<th>OECD av.</th>
<th>NZ</th>
<th>CANADA</th>
<th>DENMARK</th>
<th>ITALY</th>
<th>AUSTRALIA</th>
<th>NORWAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>AGE 74.26</td>
<td>+1.74 YEARS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>AGE 76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Measured by the effect of the vintage (year of US FDA approval) of prescription drugs used by elderly American patients.

Why the discrepancy?

Healthcare investment is increasing, while investment in medicines is not, despite medicines lowering total future healthcare spending, reducing the length of stays in hospital, preventing and treating chronic illnesses, and improving life expectancy.

The growth in year-on-year healthcare investment is up to 29 times higher than for medicines.

The Pharmac: DHB investment difference

The graph shows the investment differences between 2011 and 2015 for the Pharmac and DHBs. The investment difference is significantly higher for Pharmac compared to DHBs.
Diabetes is on the rise

Diabetes in New Zealand

More than **257,000** New Zealanders have diabetes. The number of people with diabetes grows by nearly **40** people per day.

Diabetes is a leading cause of blindness, amputation and kidney failure.

Diabetes interventions

Health interventions help people with diabetes live longer healthier lives than those without support.

- **WHAIORA DIABETES COALITION**
- Weight management tools aid discussion with GP
- Diabetes PSP e-therapy modules & telehealth support
- Medicine refill reminders
- Personalised psychosocial support & education

Diabetes is predicted to become the 7th leading cause of death in the world by 2030

1st
- United States

2nd
- New Zealand

There are **7 PTAC** recommended type II diabetes medicines waiting for funding.

To see the detailed waiting list visit [www.medicinesnz.co.nz](http://www.medicinesnz.co.nz)

Diabetes is most common among Māori and Pacific Islanders

Māori are **3 x** more likely to develop diabetes type II than non-Māori, and are more than **5 x** likely to die from it.

- **5x**
- **4x**
- **3x**
- **2x**
- **1x**

NON MĀORI

MĀORI
The medicines waiting list is too long

What is the waiting list?

Following a Pharmacology and Therapeutics Advisory Committee (PTAC)* recommendation and PHARMAC** in-house evaluation, an internal priority list of medicines is generated from which potential investment options are then chosen.

PHARMAC does not publish this list, nor the process by which it is subsequently reprioritised for final funding decisions.

Medicines New Zealand actively updates this waiting list to increase transparency around PHARMAC decision making, timelines for listing, and help with budget forecasting.

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* PTAC is PHARMAC’s primary clinical advisory committee. PTAC’s role is to provide objective clinical advice to the Board of PHARMAC.

** PHARMAC is the New Zealand government agency that decides which pharmaceuticals to publicly fund in New Zealand.

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There are:

109 PTAC recommendations for medicines yet to be funded

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2.7 YEARS IS THE AVERAGE WAITING TIME

12 YEARS IS THE LONGEST WAITING TIME FOR A MEDICINE

FINANCIAL RISK WAS THE REASON A TREATMENT FOR CHRONIC HEPATITIS C

...a preloaded adrenalin auto-injector enabling easier and faster delivery to people with anaphylaxis

...which was found to have markedly improved efficacy and reduced treatment duration over currently funded treatments, was given a low priority
New Zealand has high cancer rates

**Average cancer rate**
New Zealand’s average cancer rates are over 62% higher than the world average.

<table>
<thead>
<tr>
<th>World Average</th>
<th>New Zealand</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>183</td>
<td>295</td>
<td>96</td>
</tr>
</tbody>
</table>

**Cancer mortality rate**
New Zealand’s cancer mortality rate exceeds Australia’s average by 8%.

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>104</td>
<td>96</td>
</tr>
</tbody>
</table>

**New Zealand cancer facts**

- 13th highest rate of all cancers in the world
- 9th highest rate of colorectal cancer
- 4th highest rate of colorectal cancer in women
- 19th highest rate of breast cancer
- 18th highest rate of prostate cancer

- Highest incidence rate of melanoma skin cancer in the world
- Lung cancer is the leading cause of cancer deaths
- Colorectal mortality rates are almost double the world average
- Melanoma skin cancer rates are more than four times the world average
- New Zealand mortality rates exceed the overall world average

**New Zealand only invests 0.8% on cancer medicines**

**Ranking for access to cancer medicines in New Zealand**
Out of 13 OECD countries, New Zealand has the lowest ranking for access to cancer medicines.

<table>
<thead>
<tr>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>Germany</td>
<td>Norway</td>
<td>Sweden</td>
</tr>
<tr>
<td>7th</td>
<td>9th</td>
<td>12th</td>
<td>13th</td>
</tr>
<tr>
<td>UK</td>
<td>Canada</td>
<td>Australia</td>
<td>New Zealand</td>
</tr>
</tbody>
</table>

Access to medicines post-diagnosis, cancer <5 years
Māori have poorer health outcomes

Life expectancy is less for Māori than non-Māori

<table>
<thead>
<tr>
<th>MĀORI MEN</th>
<th>6.8 years less life expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>3x</td>
<td>more likely to die from lung cancer</td>
</tr>
<tr>
<td>3.5x</td>
<td>more likely to die from liver cancer</td>
</tr>
<tr>
<td>1.5x</td>
<td>more likely to die from prostate cancer</td>
</tr>
<tr>
<td>2.5x</td>
<td>more likely to die from stomach cancer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MĀORI WOMEN</th>
<th>7.3 years less life expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5x</td>
<td>more likely to die from breast cancer</td>
</tr>
<tr>
<td>2x</td>
<td>more likely to die from cervical cancer</td>
</tr>
<tr>
<td>4x</td>
<td>more likely to die from lung cancer</td>
</tr>
</tbody>
</table>

Health burdens for Māori

- Māori make up 27% incidences of cancer
- 12% of Māori families with ill children cannot afford prescription costs
- Māori children are 1.5 x more likely to develop asthma and are 3 x more likely to be hospitalised with eczema
- The total cancer mortality rate is 1.5 x higher for Māori than non-Māori.

Māori are 5 x more likely to:

- Wait longer for chemotherapy
- Have less lymph nodes removed
- Require emergency surgery
- Die after elective surgery

Avoidable deaths are higher for Māori than non-Māori

Compared to Australia, New Zealand has much higher rates of avoidable cancer deaths. Avoidable cancer deaths are particularly high for Māori.

Government and researchers need to work in partnership with Māori communities to facilitate effective healthcare

TAHI, RUA, TORU...

3 questions for Māori patients to ask their healthcare professionals

1. What is my main problem?
   He aha tāku raru matua?

2. What do I need to do?
   Me aha au?

3. Why is it important for me to do this?
   He aha te hua mōku?
Through the Value of Medicines Award, Medicines New Zealand aims to support an outstanding piece of research that will improve the understanding, effectiveness or safety of the use of medicines or vaccines in New Zealand. The objective of the Award is to stimulate and reward contemporary research. The Award takes the form of a single payment of $20,000 to the chosen individual or research team.

2015 Value of Medicines Award Winner – Amy Chan

Medicines New Zealand’s 2015 Value of Medicines Award was presented to Amy Chan, a pharmacist and doctoral candidate at the University of Auckland.

Chan’s research focused on New Zealand children with asthma, investigating the impact of audio-visual reminders on inhalers. The study investigated use of a novel electronic monitoring device with an audio-visual reminder function, developed in New Zealand, and the impact on adherence when used with inhaled corticosteroids. Reminders were set to ring at set times, twice daily, and an on-board LED screen displayed the date and time of the most recent dose taken. Half were randomised to receive the device for use with their inhaled corticosteroid with the audio-visual reminder function turned on, half with the function turned off.

Rescue medicine reduced to 9.5% in the intervention group, compared to 17.4% in the control group.

“This really shows the value of medicines – as kids that used their preventer inhaler regularly were able to get out and do more, play more sports and have less asthma attacks, coughing and wheezing. Families also felt less frightened about their child’s asthma,” Chan says.

The results from this work have the potential to revolutionise asthma patient outcomes by reinforcing the fact that when patients truly adhere to their medication, they will receive the full benefit.

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BERL Project 2015
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Diabetes in New Zealand
Living Well with Diabetes: A plan for people at high risk of or living with diabetes 2015–2020.
Diabetes is predicted to become the 7th leading cause of death in the world by 2030
Danael, G. et al. National, regional and global trends in fasting plasma glucose and diabetes prevalence since 1980: systematic analysis of health examination surveys and epidemiological studies with 370 country-years and 2.7 million participants. The Lancet. 2011
Living Well with Diabetes: A plan for people at high risk of or living with diabetes 2015–2020
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New Zealand Society for the Study of Diabetes.

Start of the medicines waiting list is too long
What is the waiting list?
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New Zealand has high cancer rates
Average cancer rate. Cancer mortality rate.
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New Zealand cancer facts GLOBOCAN 2012 (IARC).
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Ranking for access to cancer medicines in New Zealand

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Government and researchers need to work in partnership with Māori communities to facilitate effective healthcare
Avoidable deaths are higher for Māori than non-Māori
Sanford et al, How Many Cancer Deaths could New Zealand Avoid if Five-Year Relative Survival Rates were the same as in Australia? Australian and New Zealand Journal of Public Health, 2015.

Value of medicines
2015 Value of Medicines Award Winner – Amy Chan

Asthma

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