

Modern medicines Situational analysis; status and solutions New Zealand 2018

INTRODUCTION

Medicines New Zealand represents 18 innovative pharmaceutical companies operating in New Zealand. Our member companies are engaged in research, development, manufacturing and marketing of prescription medicines and vaccines to the New Zealand public. These medicines help keep New Zealanders out of hospitals, prevent and treat disease and play a pivotal role in ensuring a healthy and productive community.

We collaborate with government and stakeholders so New Zealand can benefit from increased access to modern medicines, providing more solutions for patients, the health system and the wider economy.

OUR MEMBER COMPANIES¹...



Help to build a strong economy in New Zealand by generating \$384 million of GDP every year.



Generate new employment opportunities in New Zealand, for every 1 job in the innovative pharmaceutical industry 9 more jobs are created.

In the last 4 years our member companies...



Invested \$21 million into research activities.



Undertook 589 local clinical trials.



Invested \$171 million into the local clinical trials industry.

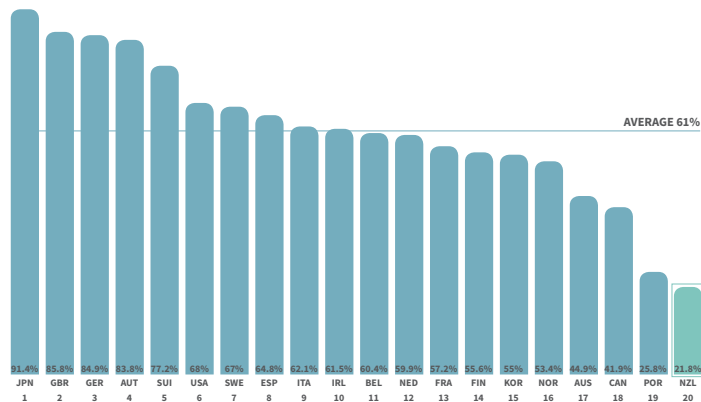


Purchased \$129 million of value added materials and ingredients from New Zealand suppliers.

MODERN MEDICINES ACCESS IN NEW ZEALAND

Publicly funded medicine access in New Zealand is decided by PHARMAC which operates under a capped funding model. It is the only part of the New Zealand health system that is capped.

NEW ZEALAND IS 20TH OUT OF 20 COMPARABLE OECD COUNTRIES FOR PUBLICLY FUNDED ACCESS TO MODERN MEDICINES²



Proportion of new medicines reimbursed of those registered in each country, 2010-2015.

NEW ZEALAND TAKES A LONG TIME TO MAKE DECISIONS ON FUNDING MODERN MEDICINES²



< 6 months



< 6 months



12mths - 1.5yrs



>1.5 years

Average: 313 days. Average time to reimbursement from registration (days), NMEs registered 2010-2015.

NEW ZEALAND PUBLICLY FUNDS LESS MODERN MEDICINES COMPARED TO OTHER COUNTRIES³



12

NEW ZEALAND



43

PORTUGAL



66

AUSTRALIA



74

FRANCE



90

ITALY



105

UK

From 2010 to 2015 New Zealand funded fewest modern medicines and innovative biologics, funding only 12 modern medicines in contrast to comparative countries.

MEDICINES SIT ON A WAITING LIST⁴

The process to get patients access to publicly funded medicines requires...

- PTAC to recommend medicines
- PHARMAC to then fund medicines

However, the existence of a medicines waiting list was established in 2015. This list has PTAC recommended medicines that are yet to be funded, despite being of clinical benefit for patients.

The waiting list grows each year



end 2015



mid 2016



end 2016



2017

Some medicines have been on this list for over a decade.

1. RECOMMENDATION - New Zealand patients to have wider access to modern medicines through the public health system.

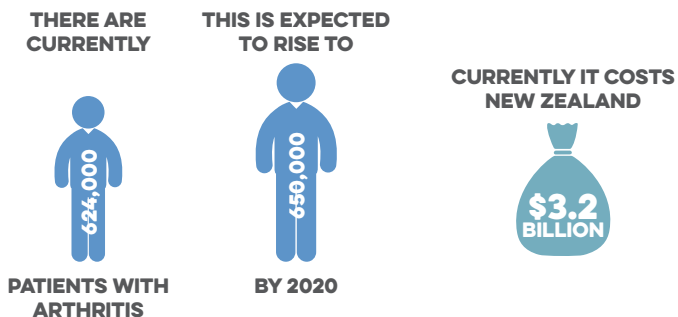
REFERENCES

1 Nana, G., Fareti, N. (2016) economic assessment of Medicines New Zealand members 2014. New Zealand: BERL. Medicines New Zealand confidential R & D survey (2016) Wellington, New Zealand: Medicines New Zealand. 2 Medicines Australia (2017). COMPARE (Comparison of Access and Reimbursement Environments): A report benchmarking Australia's access to new medicines. Edition 3: Australia. 3 Millson, B., Thiele, S., Zhang Y., Dobson-Belaire, W., Skinner, B. (2016) Access to new medicine in public drug plans: Canada and comparable countries. Ontario, Canada: Innovative Medicines Canada. 4 Della Barca, C (2017) Funding medicines in New Zealand: revision of the medicines waiting list. Auckland, New Zealand: Subscripts limited.

PATIENTS IN NEW ZEALAND

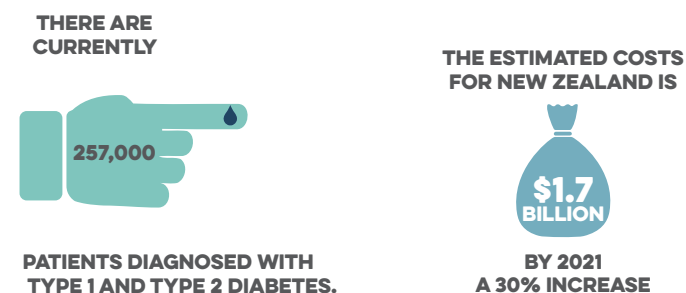
The number of patients diagnosed with chronic diseases is increasing every year in New Zealand.

ARTHRITIS ⁶



There are 5 biologic medicines available in other countries including Australia that can reduce on going damage and 6 arthritis medicines that can treat personalized conditions.

DIABETES ⁷



Diabetes impacts our ethnic communities more significantly in New Zealand.



Management of diabetes has been stated as a Government health priority, yet three types of type 2 diabetes treatments are not funded in New Zealand – going against international guidelines for treating diabetes.

RARE DISEASES ⁸

There are approximately 7000 different types of rare diseases and disorders, with more being discovered each day.



28 MEDICINE BIDS WERE RECEIVED FOR A RARE DISEASE PILOT SCHEME

OF THOSE 10 WERE SELECTED FOR FUNDING

NOW ONLY 6 ARE LISTED ON THE COMMUNITY SCHEDULE

CANCER ⁹

IN 2014 OVER 20,000

CANCER IS A RISING ESTIMATED ANNUAL COST TO NEW ZEALAND

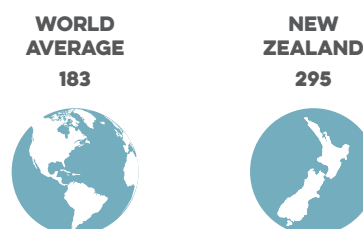


New Zealand has the highest incidence rate of melanoma skin cancer in the world – the cancer rate is 4x the world average

Lung cancer is the leading cause of cancer deaths in New Zealand

Average cancer rate

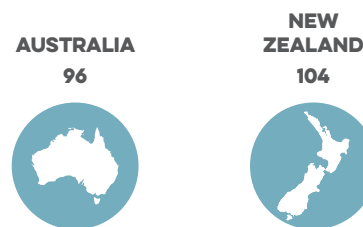
New Zealand's average cancer rates are over 62% higher than the world average.



Age standardised rate per 100,000. All cancers excluding non-melanoma skin cancer rates.

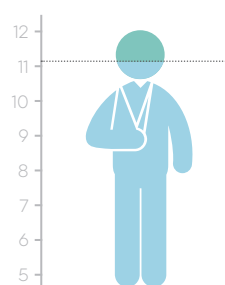
Cancer mortality rate

New Zealand's cancer mortality rate exceeds Australia's average by 8%.



Age standardised rate per 100,000. All cancers excluding non-melanoma skin cancer mortality rates.

COST OF ILL HEALTH ¹⁰



THE COST OF ILL HEALTH (ABSENTEEISM AND PRESENTEEISM) TO NEW ZEALAND IN 2004 ALONE WAS \$11.2 BILLION

REFERENCES

⁶ Arthritis New Zealand. (2017). Taking the next steps for Arthritis: An Arthritis New Zealand election manifesto. New Zealand. ⁷ Ministry of Health. (2009). New Zealand Cost-of-Illness Studies on Long-Term Conditions. Wellington: Ministry of Health. Ministry of Health. (2016). *Ala Mo'ui progress report*. Wellington: Ministry of Health. Ministry of Health. (2015). *Tatau Kahukura: Māori Health Chart Book 2015 (3rd edition)*. Wellington: Ministry of Health. Ministry of Health. (2016). *Virtual diabetes register: Number of people in VDR by age-group and ethnicity for 2010-2015*. Wellington: Ministry of Health. New Zealand Statistics (2013). *Census quick stats about culture and identity*. Retrieved from: www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity/asian.aspx. ⁸ New Zealand Organisation Rare Diseases (2017) *Facts and figures*. Retrieved from: <http://www.nzord.org.nz/helpful-information/rare-disease-facts-and-figures>. New Zealand Organisation Rare Diseases (2016) - *Annual Report*. New Zealand Organisation Rare Disease (2017). *How many of the 10 medicines funded through the pilot are actually in use currently in NZ?: Pharmac response*. ⁹ Ministry of Health. (2014) *New cancer registrations*. Retrieved from: <http://www.health.govt.nz/publication/new-cancer-registrations-2014>. Ministry of Health. (2014) *Mortality 2014 data tables* Retrieved from: <http://www.health.govt.nz/publication/mortality-2014-data-tables>. Blakely, T., Atkinson, J., Kyjzhinadze, G., Wilson, N., Davies, A., Clarke P., (2015). *Patterns of cancer care costs in a country with detailed individual data*. Otago, New Zealand: Otago University. World Health Organisation International Agency for Cancer (2012) *GLOBOCAN: Estimated Cancer incidence, mortality and prevalence worldwide in 2012*. ¹⁰ Holt, H. (2010) *Cost of ill health*. New Zealand treasury working paper. New Zealand: Treasury.

BENEFITS OF INNOVATIVE MEDICINES

Introducing modern medicines into the public health system provides many benefits for patients, the health system and the wider economy. If patients were able to receive the right medicines at the right time this could lead to a reduction in hospitalisations. It can provide effective preventative treatment for further complications, and can reduce increasing treatment and procedure costs to health care systems.

MODERN MEDICINES ARE TRANSFORMING THE TREATMENT OF CHRONIC DISEASES ¹¹



Between 2000 and 2012, new therapies contributed to a 48% and 31% decline in the diabetes death rate in Korea and Canada, respectively.



New Rheumatoid Arthritis therapies are modifying the disease to dramatically increase the quality of life for patients. They are slowing and sometimes reversing negative physical symptoms of the disease.



Death rates of non-infectious diseases were reduced by nearly 20% in the EU5, Australia, Canada and Japan from 2000 – 2012.



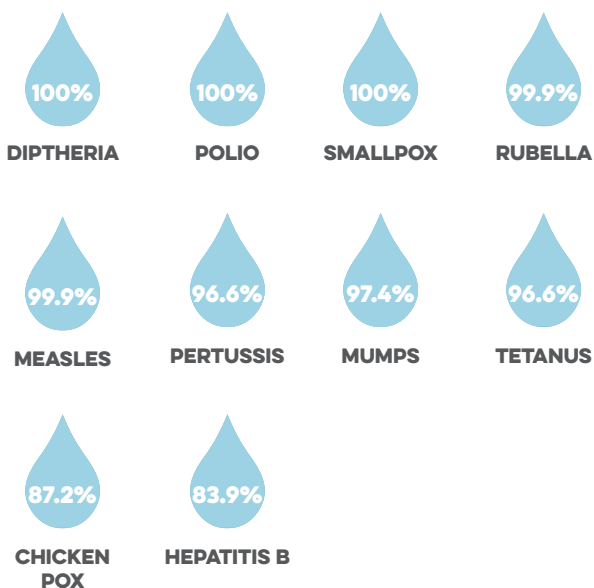
New hepatitis C therapies have cure rates above 90%.



Patients with HIV are living longer more productive lives.

MEDICINES MAKE A HUGE IMPACT ON PUBLIC HEALTH ¹²

Reduction in the incidence of the following diseases since the introduction of a vaccine.



COST EFFECTIVE SOLUTION ¹³

CANCER

Modern medicines are a cost effective solution, for every dollar spent on new cancer medicines a dollar can be saved downstream in the New Zealand healthcare system.

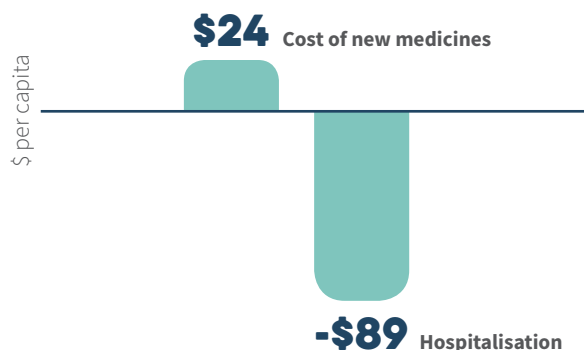


CHRONIC DISEASES



For every dollar spent on new medicines **\$3 to \$10 is saved** on hospitalisations for adherent patients with congestive heart failure, high blood pressure, diabetes and high cholesterol.

NEW CARDIOVASCULAR MEDICINES LED TO DIRECT SAVINGS ON HOSPITALISATIONS IN 20 OECD COUNTRIES*, 1995-2004 ¹⁴



IN 2011, MODERN MEDICINES REDUCED HOSPITAL EXPENDITURE IN AUSTRALIA BY ¹⁵



Medicines are an important part of the healthcare solution for New Zealand, there needs to be more action taken to improve the level of investment.

2. RECOMMENDATION - Modern medicines to be recognised as a cost effective solution for New Zealand's public health system.

¹¹ Who mortality database (2016). Kremer. (2008). COMETS path, and the new biologicals in rheumatoid arthritis: Lancet. PHRMA (2017) Prescription medicines in context. PHRMA (2016) Four facts about spending on prescription medicines. ¹² Roush, S., Murphy, T.,(2007). Historical comparisons of morbidity and mortality for vaccine – preventable diseases in the united states. Georgia. USA: National Center for Immunization and Respiratory Diseases. ¹³ Roebuck, C., Liberman, J., Gemmill-Toyama, M., Brennan, T.,(2011). Medication adherence leads to lower health care use and costs despite increased drug spending. Health Affairs, p91 – 99. doi: 10.1377/hlthaff.2009.1087. ¹⁴ Lichtenberg, F. (2009), Have newer CV drugs reduced hospitalizations in 20 OECD countries? Evidence from longitudinal country level data on 20 OECD countries, 1995 – 2003: Health Economics. ¹⁵ Lichtenberg, F. Williams Spence, J.(2016).The impact of pharmaceutical innovation on the longevity and hospitalisation of New Zealand cancer patients. New York: Columbia University, National Bureau of Economics Research.

NEW ZEALAND'S HEALTH PRIORITY

CUP OF COFFEE OR MEDICINES? ¹⁶

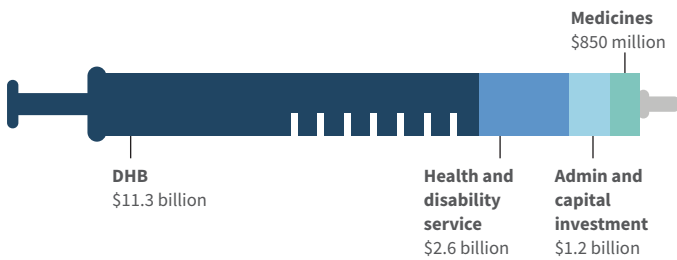
As a country, each week we spend on average...



3. RECOMMENDATION - The New Zealand government to invest an additional \$0.77 per person, per week to immediately clear and fund the medicines waiting list.

New Zealand doesn't recognise the value of modern medicines and only contributes a small amount of its health budget to publicly fund them.

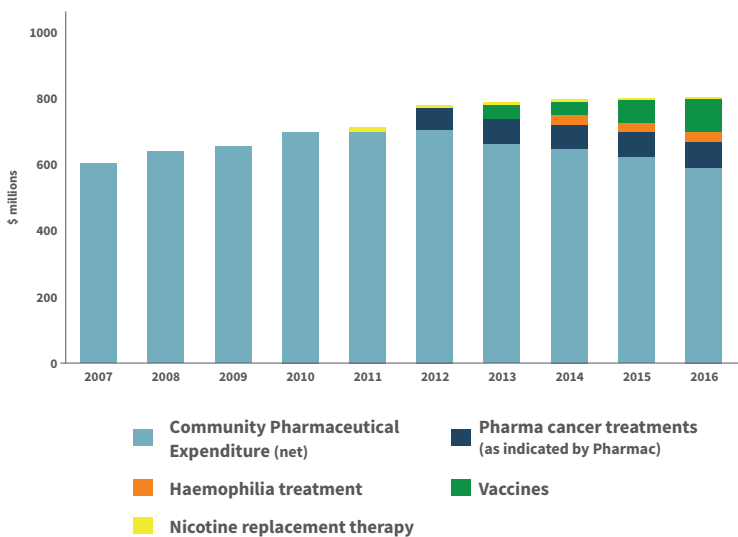
ONLY 5.3% OF OUR HEALTH BUDGET IS INVESTED INTO MEDICINES ¹⁶ AUSTRALIA INVESTS 10%, U.K 11%



4. RECOMMENDATION - A budget boost for publicly funded medicines: by 2020, an increase from 5.3% to 7% of the health budget.

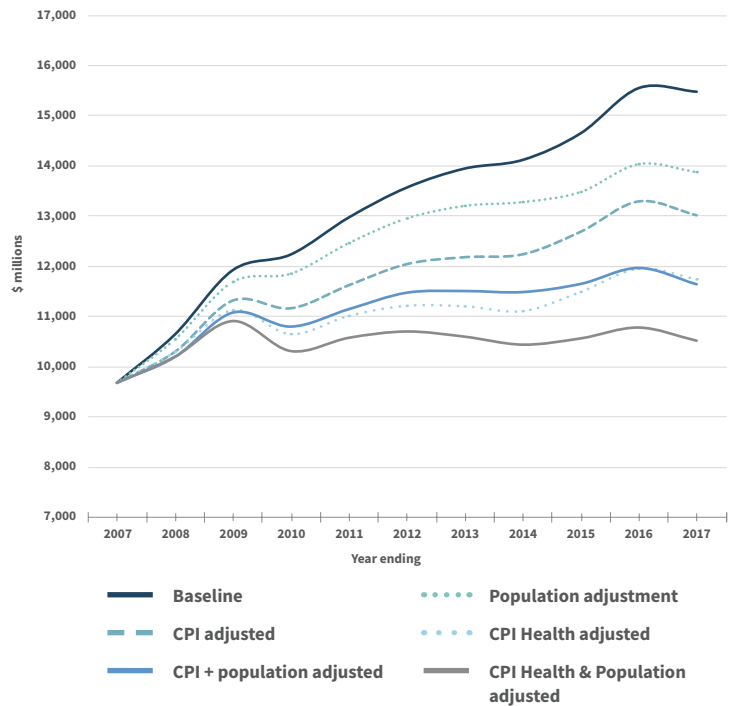
NET COMMUNITY PHARMACEUTICAL EXPENDITURE IS DROPPING ¹⁷

Breakdown of the net CPB (unadjusted)



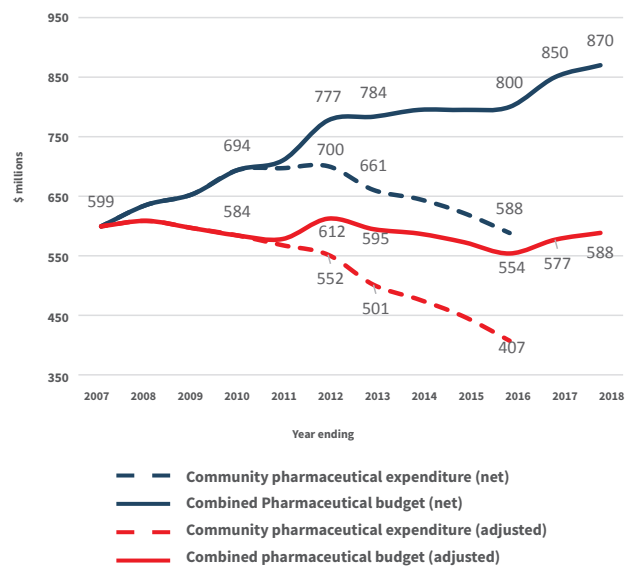
NEW ZEALAND'S HEALTH BUDGET IN 'REAL TERMS' ¹⁷

Effect on Vote Health (budget estimate) of adjusting for inflation (CPI), (CPI-Health) and population growth.



PHARMACEUTICAL INVESTMENT IN 'REAL TERMS' ¹⁷

Adjusted and unadjusted combined pharmaceutical budget and community pharmaceutical expenditure (CPI+Health+Pop growth)



RECOMMENDATIONS

1. New Zealand patients to have wider access to modern medicines through the public health system.
2. The New Zealand government to invest an additional \$0.77 per person, per week to immediately clear and fund the medicines waiting list.
3. Modern medicines to be recognised as a cost effective solution for New Zealand's public health system.
4. A budget boost for publicly funded medicines: by 2020, an increase from 5.3% to 7% of the health budget.

REFERENCES

¹⁶ Vote health: the estimates of appropriations 2016/17. (2016) Wellington, New Zealand: Treasury. ¹⁷ Hogan, S. Siddharth, P. Kriebel, T. (2017). Community pharmaceuticals expenditure trends. Wellington, New Zealand: NZIER.