



# **Access to Innovative Cancer Treatments in New Zealand**

**Philip Hope, CEO, Lung Foundation New Zealand**  
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# Introduction

**Lung Foundation New Zealand (LFNZ)** is a non-government organisation (patient advocacy group) dedicated to increasing survival for lung cancer. LFNZ provides information and support for lung cancer patients and carers and is devoted to advocacy, per; prevention, early detection (screening), stigma, access to more effective treatments, an increase in research funding, Smokefree 2025.

## Vision

New Zealanders know how to keep their lungs healthy and they investigate symptoms of lung disease earlier.

## Mission

To increase survival for lung cancer

## Goals

- Promote Lung Health
- Promote Early Diagnosis of Lung Disease
- Reduce Lung Cancer Deaths

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# Lung Cancer, NZ's Biggest Cancer Killer

- 2015 - 2189 Diagnosed 1805 Died
- 5 Kiwis die of lung cancer every day (biggest cancer killer since 1969)
- 1 Maori dies every day in NZ from lung cancer
- More kiwis die of lung cancer than Breast, Prostate and Melanoma
- Men 45-74 Women 65-74
- 1 in 5 patients never smoked
- Just 30% of patients smoke at the time of diagnosis
- Registration and mortality rates much higher for Maori



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## Lung Cancer and other Cancers

<u>Registrations</u>	<u>Deaths</u>	<u>Total</u>
<b>Lung cancer, 2189</b>	<b>1805</b>	<b>82.5%</b>
Bowel cancer, 3150	1267	40%
Leukaemia, 703	353	50%
Breast cancer, 3292	674	20%
Prostate cancer, 3080	647	21%
Melanoma, 2424	378	16%

***Deaths as a percentage of total registrations - 2015***



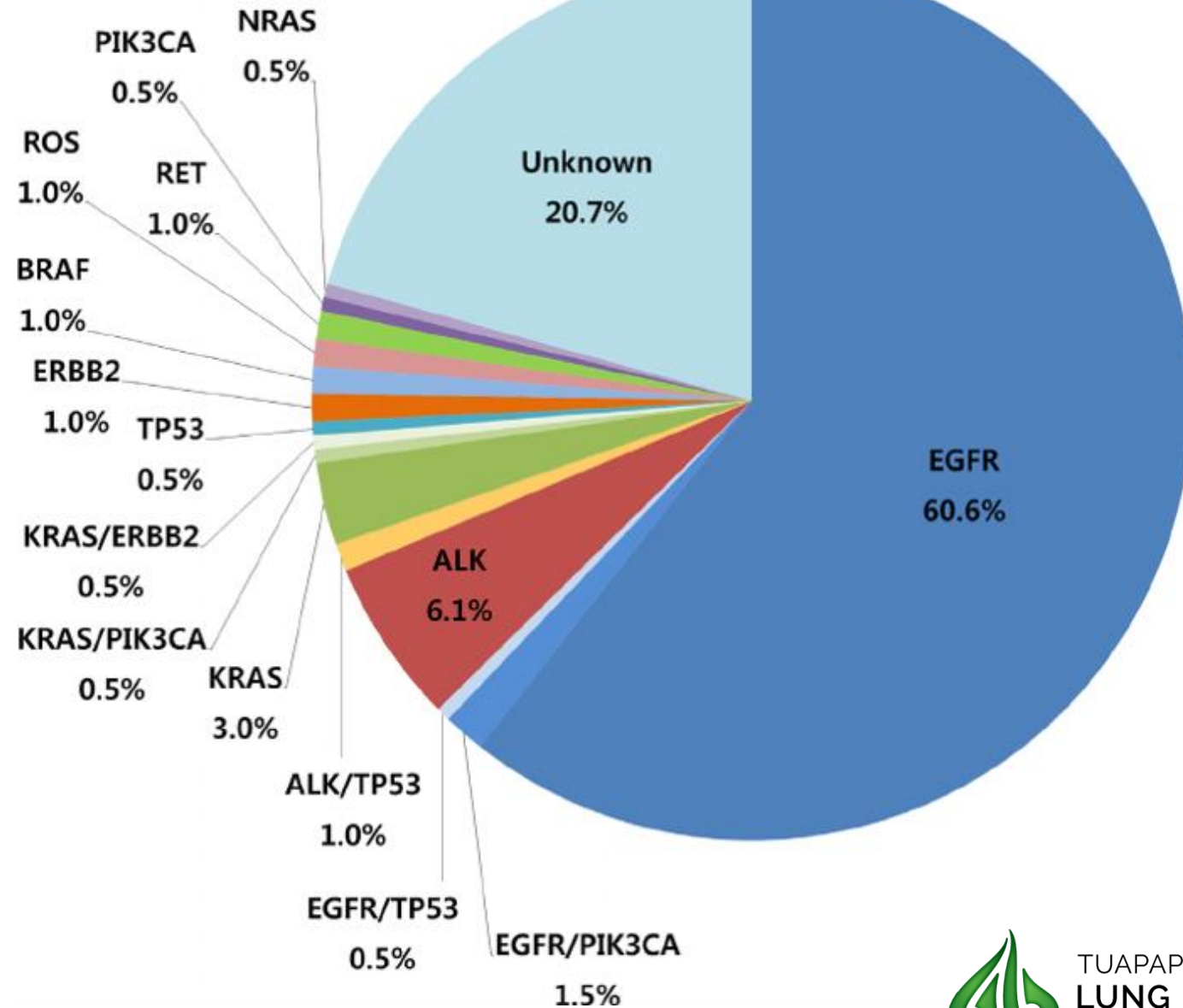
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# Biomarkers

**Access to the right treatment is access to Life..**

Personalised cancer treatment begins with molecular testing which informs the treatment pathway...

For many, standard chemotherapy is replaced by targeted therapy and immunotherapy and various combinations.



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# Lung Cancer, Extreme Inequity

Lung cancer is brutal and patients have no time to wait. Right now more than 1800 patients in New Zealand DO NOT have an effective first line treatment for advanced lung cancer, resulting in premature death for the majority of patients.

Lung cancer is the leading and second highest cause of death in Maori females and males respectively. New Zealand has singled out inequities for its indigenous people as a priory, however the lack of commitment to reduce inequalities is indefensible and unacceptable.

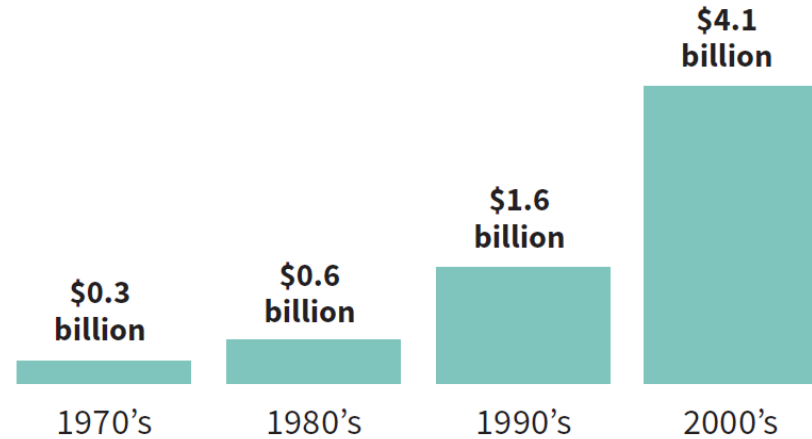
*Article 3 of the Treaty outlines the crowns responsibility to protect the health and wellbeing of Maori from illness and premature death, so they can enjoy the same quality and level of health as others in Aotearoa.*



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# From molecule to medicine: an expensive undertaking

The cost to develop a modern medicine is increasing <sup>1,2</sup>

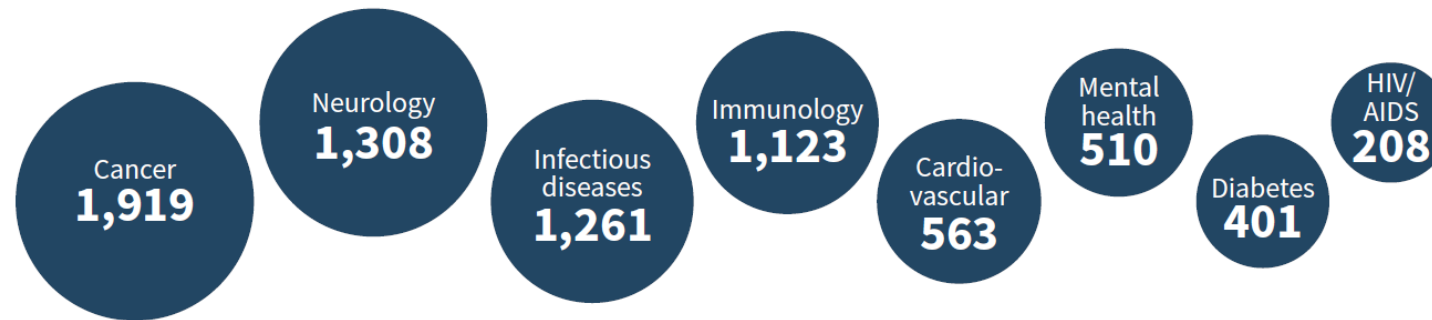


## Key drivers include:

- Increased complexity of medicines
- Increased cost of clinical trials
- Higher medicine failure rates during development.

Only 1 in 6,000 compounds make it through the process.

7, 000 modern medicines in development around the world <sup>3</sup>



It takes on average 12 years to develop a modern medicine.



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# Modern medicines\* pay for themselves....

## Reducing hospital costs <sup>1</sup>



In 2011, innovative medicines reduced hospital expenditure in Australia by \$7 billion.

Medicines are an important part of the healthcare solution for New Zealand and there needs to be more action taken around getting and improved investment.

## Reducing patient mortality <sup>1</sup>

Funding one new cancer medicine in New Zealand...

reduces mortality  
**5%**

reduces hospital stays  
**5.6%**

**\* The term 'MODERN MEDICINE(S)' means any novel or innovative medicine(s) which are first in class or first in a therapy area or are breakthrough therapies. NB: it does not refer or include generic medicines which are generally older, non-innovative drugs.**

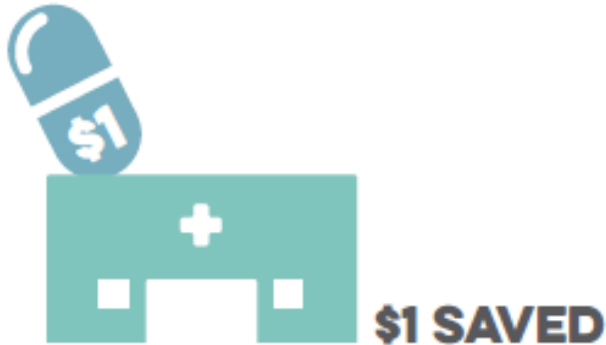




# Modern medicines: a cost-effective solution as part of the public health system

## 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.

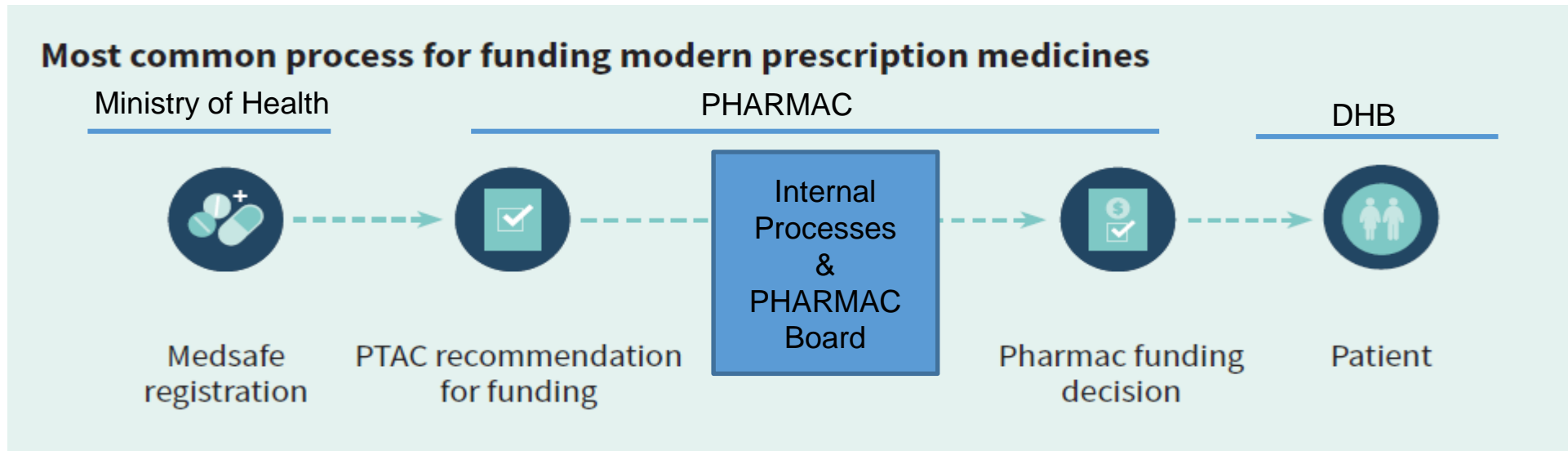


## CHRONIC DISEASES



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 Zealand: Getting medicines to patients



- Ministry of Health (Medsafe): determine if medicine is safe and efficacious (effective).
- DHBs – provide medicines budget funding from within their total pool of funding and get medicines to patients (community and hospital setting).
- The Pharmacology and Therapeutics Advisory Committee (PTAC) reviews funding applications for new medicines. PTAC makes recommendations on which medicines should be funded (PHARMAC does not have to follow these recommendations).
- PHARMAC: Determine if a medicine gets funded (Factors for Consideration, Budget) and manage, but don't own, the country's medicines budget on behalf of all DHBs.

## Medsafe process timelines for innovative pharmaceuticals (modern medicines): registration and market approval.

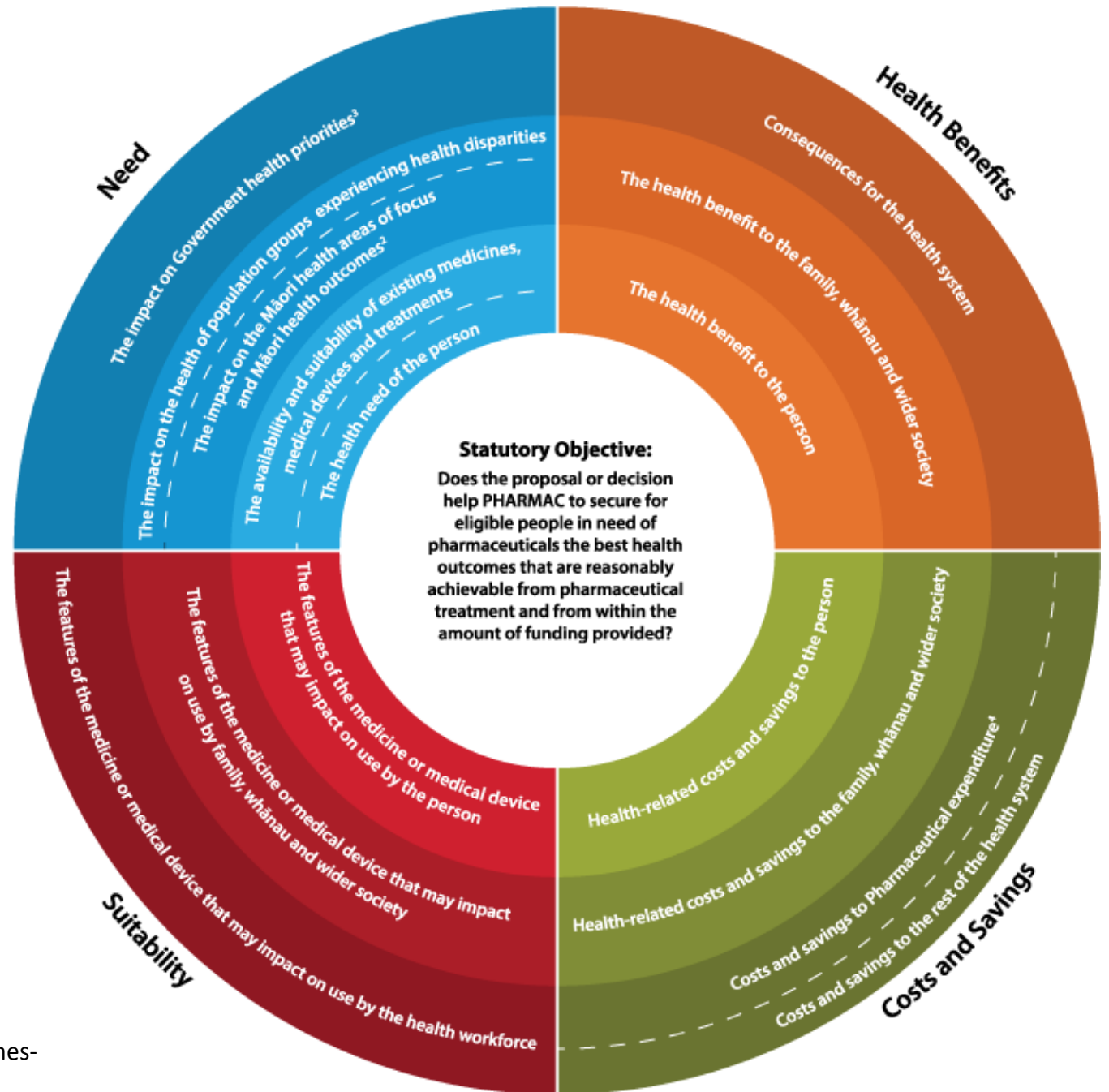
Average time for applications to be concluded and registered (total days)			
Application type*	2015	2016	2017
Higher risk medicine	467	388	503
Higher risk medicine via abbreviated evaluation	312	373	411
Priority assessment for Higher risk medicine	280	338	132
Priority assessment via abbreviated evaluation	158	148	225

\* Modern medicines are all classified as high risk applications under NZ regulatory regime. Generics are classified as intermediate risk.

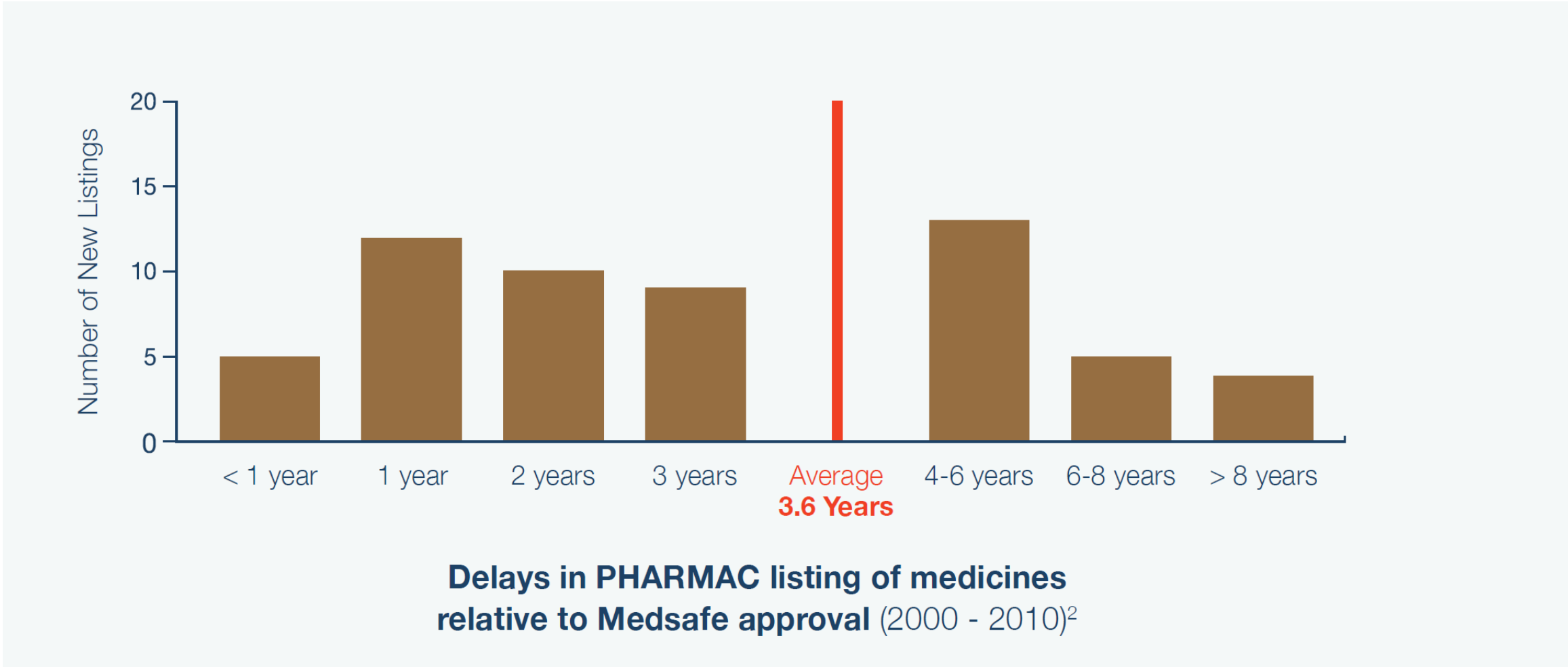
Source: Medsafe website (NB: no data publicly available for 2018, 2019 or 2020).

# PHARMAC's Factors for Consideration

- Need
- Health Benefits
- Costs and Savings
- Suitability



# Timeframes for patient access to publicly-funded medicines after Medsafe registration



Source: Wonder, Milne, Access to new medicines in New Zealand compared to Australia NZMJ November 2011 Vol 124 (1346)

# Modern medicines : How long before available to patients after Medsafe registration?

Average time (in days) after registration before public reimbursement of modern medicines for key therapy areas in New Zealand compared with OECD Average over 2011-2018 time period.

Key therapy areas	New Zealand	OECD20 Average
Arthritis	N/A*	193
Asthma/COPD	513	228
Cancer	698	287
Cardiovascular	711	307
Diabetes	N/A*	274
Hepatitis C	444	217
Rare Disease	625	307
Mental Health	N/A*	158
Others	834	270
Average	659 days	273 days

PHARMAC approval times may be improving compared to 2000-2010 period (3.6 years), but still almost 2 years – twice as long as OECD average.

\* Not applicable: No medicines meeting the report’s criteria for a modern medicine were publicly funded in New Zealand for these therapy areas, so no time could be determined.

# Modern medicines: an OECD country comparison

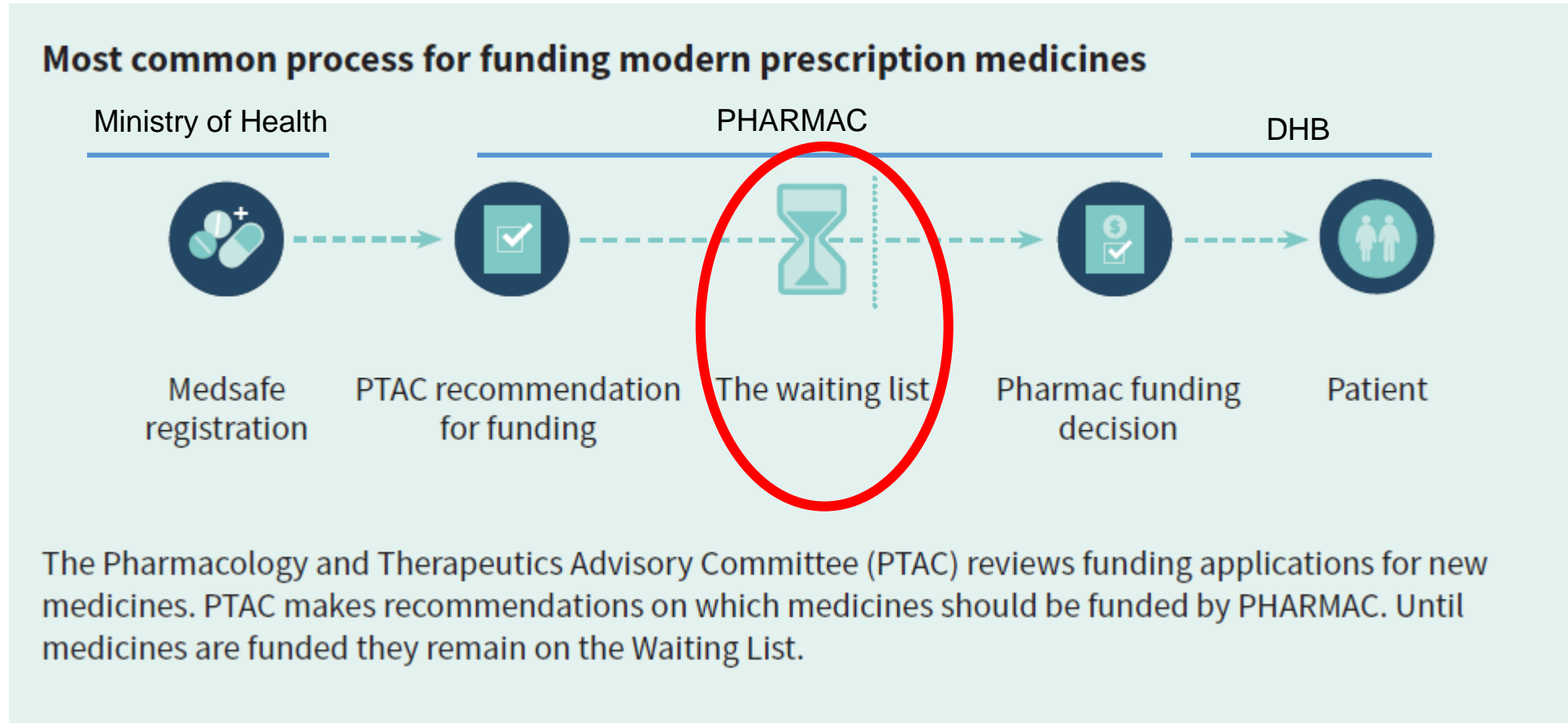
Number of publicly reimbursed modern medicines in New Zealand and comparator OECD countries between 2011-2018 by key therapy area.

Key therapy areas	Publicly funded modern medicines by country								Total registered /launched
	NZL	POR	AUS	FRA	FIN	ITA	UK	GER	OECD20
Arthritis	0*	1	3	7	6	7	7	7	11
Asthma/COPD	5	5	8	7	10	8	12	11	17
Cancer	7	6	35	48	45	52	60	62	90
Cardiovascular	1	5	5	7	9	10	11	12	22
Diabetes	0*	9	13	2	14	13	14	13	34
Hepatitis C	3	3	10	10	7	10	10	10	17
Rare Disease	2	1	7	22	11	20	20	27	36
Mental Health	0	0	0	0	0	0	0	0	5
Others	6	19	25	48	52	54	70	69	171
Total	24	49	106	151	154	174	204	211	403
Country rank	20th	19th	17th	9th	8th	5th	2nd	1st	

\* No medicines meeting the report's criteria for a modern medicine were publicly funded in New Zealand for these therapy areas.

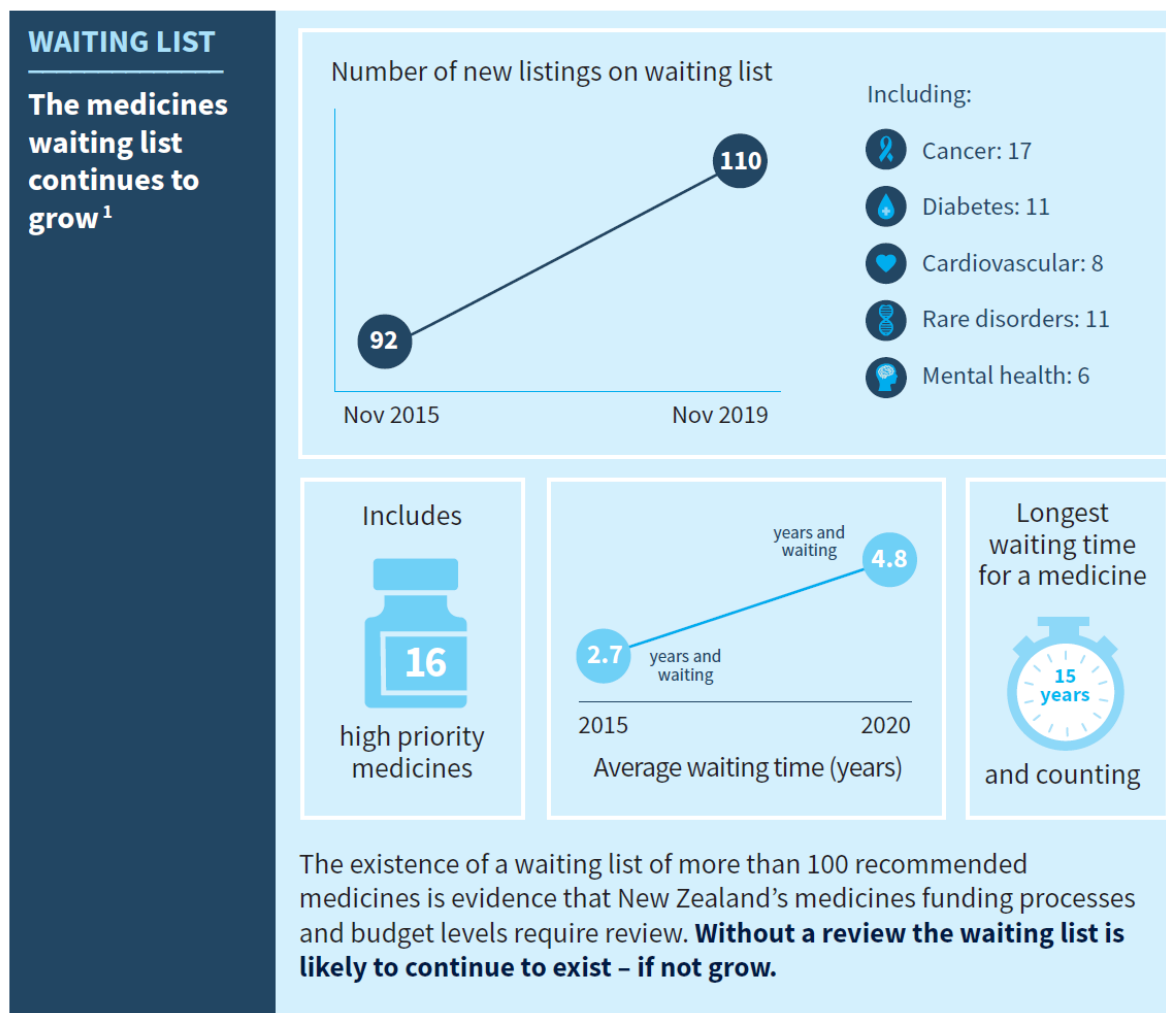
**PHARMAC approval times may be improving for modern medicines BUT approving a lot less modern cancer medicines compared to other OECD nations with similar public health funding systems or wealth.**

## Sometimes waiting for medicines to get through funding approval process ....





.. and the Medicines waiting list is getting bigger and longer average waiting time i.e. without reimbursement process completion



# Publicly-funded targeted NSCLC treatment options\* Australia & NZ : as at 31 May 2020



Afatinib  
Alectinib  
Ceritinib  
Crizotinib  
Erlotinib  
Gefitinib  
Osimertinib

Atezolizumab  
Nivolumab  
Pembrolizumab  
Durvalumab



Alectinib  
Erlotinib  
Gefitinib

= Medicines inequity

Targeted therapies

Immunotherapies

\* Excludes standard chemotherapy treatment regimes

Sources: 1. PHARMAC. Pharmaceutical Schedule. <https://www.pharmac.govt.nz/wwwtrs/ScheduleOnline.php>  
2. PBS Australia. <https://www.pbs.gov.au/pbs/home;jsessionid=1bmrnpg87vybc55caexxs15bh>



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# NME (modern) medicines access in the OECD

Key metrics of New Zealand and 7 other comparable OECD countries

Key Metrics	NZL	POR	AUS	FRA	FIN	ITA	UK	GER
Country Rank in Table 1	20th	19th	17th	9th	8th	5th	2nd	1st
Pharmaceutical Expenditure 2018 <sup>ab</sup> (% of Total Health Expenditure)	5.2%	14.6%	14.7%	13.2%	12.3%	17.5%	11.9%	14.1%
Pharmaceutical Expenditure 2018 <sup>ab</sup> (% of GDP)	0.3%	1.3%	1.4%	1.5%	1.1%	1.5%	1.1%	1.6%
GDP per Capita 2018 <sup>c</sup> (thousand Intl\$.)	\$40.1	\$32.4	\$52.4	\$45.9	\$46.6	\$39.7	\$45.7	\$52.4
World Wealth Ranking <sup>c</sup> (2018)	34th	46th	20th	28th	27th	36th	29th	19th

Poor medicines access cannot be explained by lack of wealth but can be partially explained by policy settings in the New Zealand Government on pharmaceutical investment where NZ is well below OECD norms.

# New Zealand: What's the problem? .... Funding?

**Table 1 CAGRs with different adjustments for inflation and population growth**

	CPB net (2006/07- 2017/18)	Community pharms (net) (2006/07- 2017/18)	Vote Health Budget (2006/07- 2017/18)
Unadjusted values	3.5%	-1.2%	4.8%
Population-adjusted	2.1%	-2.4%	3.4%
CPI-adjusted	1.6%	-3.0%	2.8%
CPI-Health-adjusted	1.0%	-3.5%	2.2%
CPI- and population-adjusted	0.3%	-4.2%	1.5%
CPI-Health and population-adjusted	-0.3%	-4.8%	0.9%

**Compared to total health budget ('Vote Health') successive NZ Governments have overseen a medicines budget in DHBs that has NOT kept up with population growth or inflation adjustments since before 2007 !!**

**Source: NZIER, Statistics NZ, Data obtained from OIA responses, PHARMAC Annual Reviews and Vote Health Budget Appropriations.**

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# Public Perceptions of access to medicines in NZ

- **49% of respondents had a high level of concern about the access Kiwis have to new medicines.**
- **48% of respondents believe New Zealand has worse access to medicines than countries like Australia (28% the same access, 15% better access and 10% were unsure).**
- **84% of respondents think that the Government should provide more money to improve New Zealanders' access to new medicines.**
- **78% of respondents think it is not fair for New Zealanders to have to fundraise to pay for medicines that are not publicly funded.**
- **51% of respondents would consider moving to Australia in order to access a prescription medicine they need if it meant prolonging, improving or saving their life.**

## Reference

UMR (December 2019). Access to Medicines Survey Medicines NZ, December 2019.  
Perceptive (December 2019). Omnibus Report. New Zealand.

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# Patient advocacy group feedback per reimbursement assessment

**Key pieces of information used in assessment process:** Cost, efficacy and overall survival; Health professionals expert opinion; Need and demand.

**Has your patient advocacy group ever been involved in providing patient input for the assessment processes?** No consultation; Opinions are ignored.

**Do you know how drug pricing works for cancer medicines in your country?** Capped budget restricts funding to reimburse new drugs; No transparency of price negotiations.

**What are your ideas on how access could be improved in New Zealand?** Restructure Pharmac; Create a channel for patients to be heard; Increase patient voice at every step

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# Lung Cancer Patients Want

## To Live

Access to more effective treatments when necessary

Burden of diseases targeted

Patient Voice with the reimbursement processes

Transparent decision making by Pharmac

Health principles reflected

Not to be Stigmatised



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# PHARMAC Factors For Consideration

Patients want **transparency** in how the framework is applied to individual treatments.... This is a separate issue to the waiting list.

- **Need**
- **Health Benefits**
- **Costs and Savings**
- **Suitability**



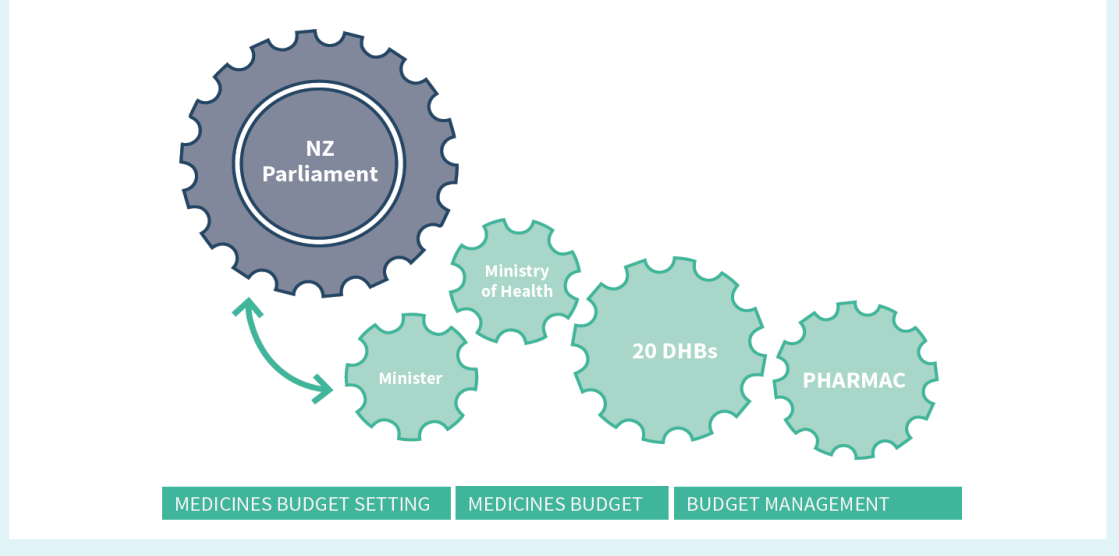
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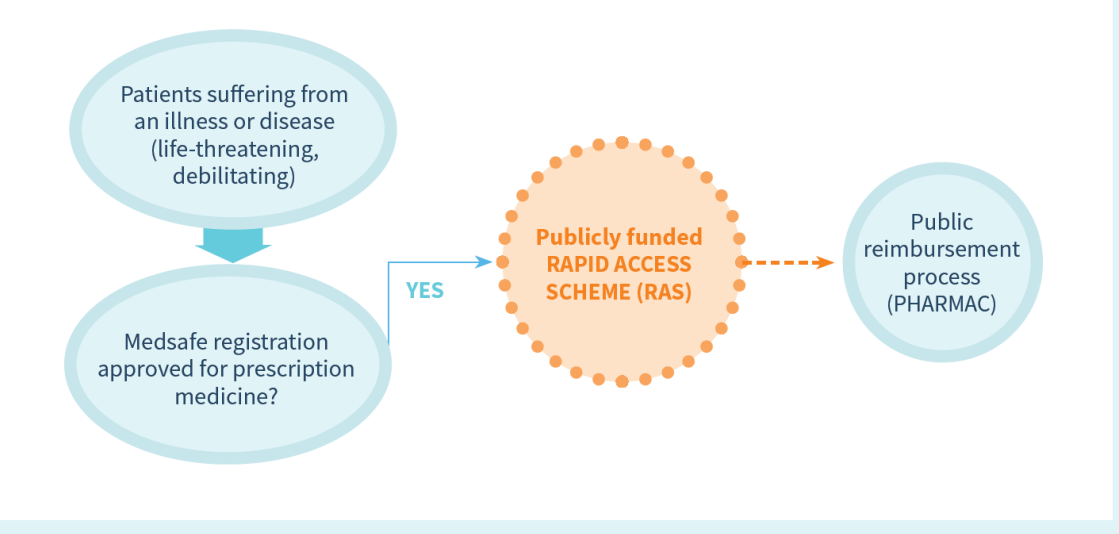


# Solutions?

## #1 : A separate medicines budget appropriations process



## #2: A rapid access scheme for modern medicines



## #3: A future-focused medicines strategy for NZ health system

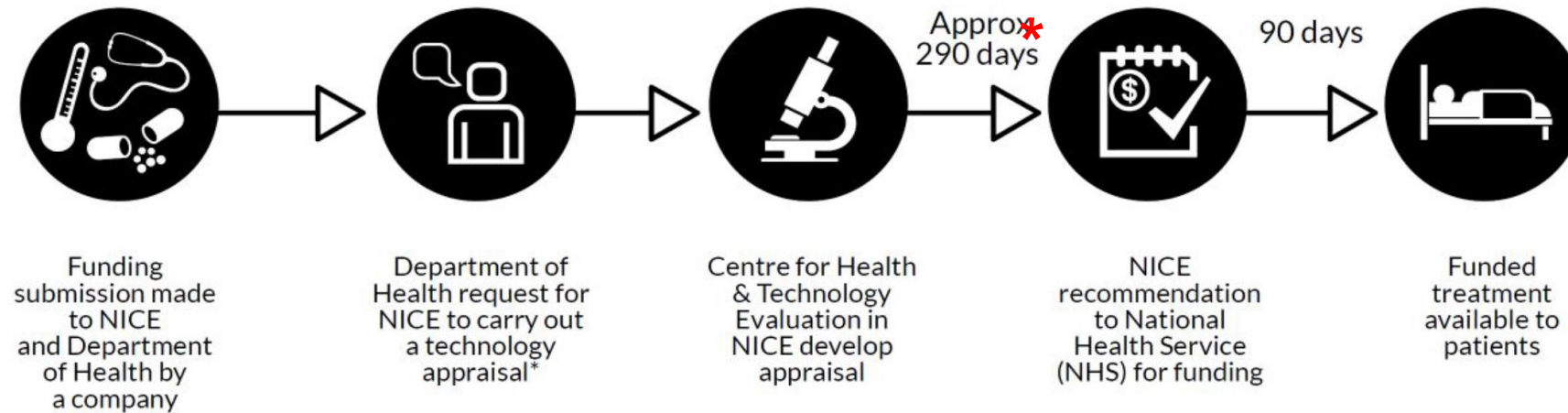


Sources:

1. NZIER (May 2020). A new generation medicines policy. Wellington, New Zealand.
2. NZIER (December 2019). Rapid access to new medicines in New Zealand. Wellington, New Zealand.
3. NZIER (January 2020). Establishment of a medicines appropriation. Wellington New Zealand.

# Better collaboration, transparency & timely decision-making work !! e.g. England

Most common process for funding health technologies including medicines, medical devices & surgical procedures: <sup>1,2,3</sup>



**\* NICE now doing decision processes for cancer medicines in 90 days ! + 90 days for NHS funding = 180 days from application to funding !**

**NICE provides guidance to the NHS in England on the clinical and cost effectiveness of health technologies. NICE carries out appraisals of health technologies at the request of the Department of Health and Social Care. Guidance produced by NICE on health technologies is also applied selectively in Northern Ireland and Wales.**

\*Technology appraisals are recommendations on the use of new and existing medicines and treatments within the NHS

Sources: 1. Guide to the processes of technology appraisal. (2018). Retrieved from <https://www.nice.org.uk/process/pmg19/chapter/foreword> | 2. Guide to the methods of technology appraisal. (2013). Retrieved from <https://www.nice.org.uk/process/pmg9/chapter/introduction> | 3. Table 3 Expected timelines for the appraisal process: starting the process, preparing the ERG report and technical engagement. (2018). Retrieved from <https://www.nice.org.uk/process/pmg19/chapter/the-appraisal-process#table-3-expected-timelines-for-the-appraisal-process-starting-the-process-preparing-the-erg-report>