



# Diabetes New Zealand

Our audience is **250,000** people with diabetes and **1 in 4** with pre diabetes.



[www.diabetes.org.nz](http://www.diabetes.org.nz)



# Our impact - vision and strategy

## Our Vision

Life free of diabetes and all its complications and burdens

## Our Mission

Lead, champion and advocate for change to reduce the incidence of diabetes, improved diabetes health care, and empower those affected by or at risk of diabetes to lead healthy, active lives



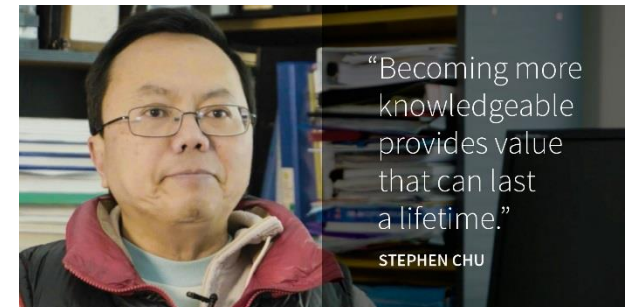
## Our Purpose

Provide  
Leadership

Empower

Champion and advocate

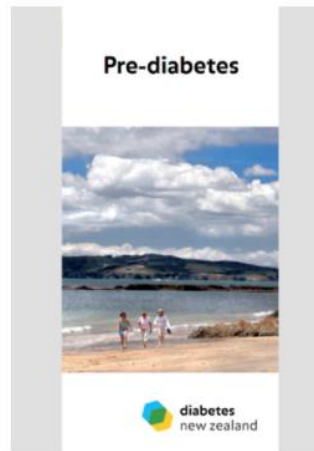
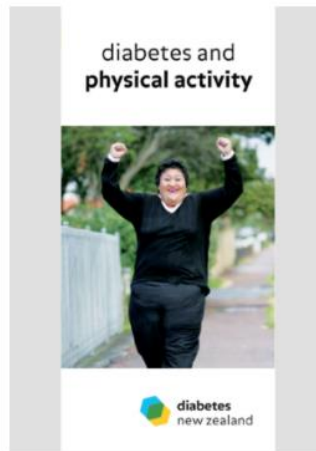
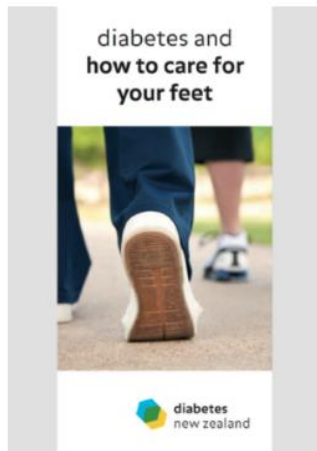
Prevent





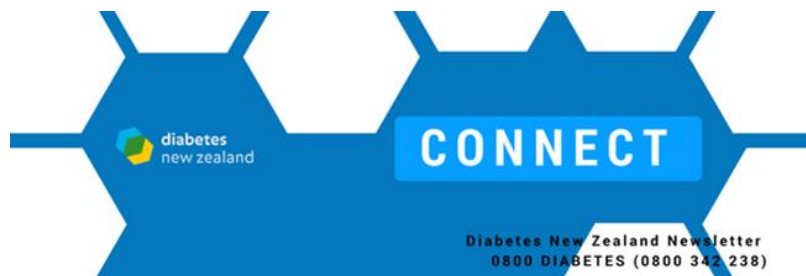
# Our impact - reach and engagement

**0800 342 238 (Diabetes) - [admin@diabetes.org.nz](mailto:admin@diabetes.org.nz)**





# Our impact – reach and engagement



# #1 pack (Jerry the Bear)

The #1 pack is available for children aged 4-10 years old residing in New Zealand.

[www.diabetes.org.nz](https://www.diabetes.org.nz) > Youth > #1 pack and Jerry the bear

The screenshot shows the website <https://www.diabetes.org.nz> with the URL bar displaying "Secure | https://www.diabetes.org.nz/1-pack-and-jerry-the-bear/". The website header includes the "diabetes new zealand" logo and navigation links: HOME, WHAT IS DIABETES, YOUTH, LIVING WELL, RESOURCES, WHO ARE WE, and CONTACT US. Social media icons for Instagram, Facebook, and a search icon are also present.

The main content area features a large illustration of Jerry the Bear, a brown teddy bear with yellow patches on his chest and legs. He is surrounded by white heart shapes on a light blue background. To the left of Jerry, there is a yellow button labeled "JOIN US" and another labeled "SUPPORT US". Below these buttons, there is an illustration of a blue insulin pump and a blue insulin pen. A white arrow points from the text "LOOK! HE HAS A virtual pump + AN insulin PEN!" to the pump and pen. To the right of Jerry, there is a white arrow pointing from the text "MEET Jerry THE BEAR!" to Jerry. Below this, there is an illustration of a blue blood sugar meter and a blue test strip. A white arrow points from the text "USE HIS app to TO CHECK HIS blood sugar!" to the meter and test strip.

# Type 1 and Type 2 – Know the Difference



## KNOW THE DIFFERENCE TO MAKE A DIFFERENCE

IT COULD SAVE SOMEONE'S LIFE

## BE A DIABETES DETECTIVE



LOOKS FOR  
'CLUES'  
(SIGNS)



GATHERS  
EVIDENCE  
(SYMPTOMS) AND  
LOOKS FOR  
SUSPECTS



HELPS BRINGS  
THE CASE TO A  
CONCLUSION  
(DIAGNOSIS  
BY GP)



FINDS  
SUPPORT  
FROM  
DIABETES NZ



SOLVES A  
MYSTERY AND  
MAKES  
A DIFFERENCE

## TYPE 1

### WHAT IS IT?

### AN AUTOIMMUNE CONDITION

in which the immune system destroys the cells in the pancreas that produces insulin

### RAPID ONSET

If not diagnosed quickly may lead to coma or possible death

NO KNOWN  
PREVENTION



CAN YOU PREVENT IT?

NO CURE BUT CAN  
BE CONTROLLED



CAN YOU CURE IT?

WHEN DOES IT OCCUR?

USUALLY DEVELOPS IN  
CHILDHOOD



### WHAT ARE THE COMPLICATIONS?



1. BLINDNESS AND  
NERVE DAMAGE



2. HEART DISEASE, STROKE,  
KIDNEY DISEASE,  
PERIODONTAL DISEASE



3. AMPUTATION OF LIMBS,  
DIALYSIS, KIDNEY  
TRANSPLANTS,  
LOSS OF TEETH



4. REDUCED LIFE  
EXPECTANCY

## TYPE 2

### WHAT IS IT?

### A METABOLIC CONDITION

in which the body progressively fails to produce insulin and the body cells resist insulin action

### INSIDIOUS ONSET

Is usually recognised only 5-12 years after hyperglycemia develops

GENETIC  
PREDISPOSITION  
*but weight loss and a healthy  
lifestyle can prevent it*

NO CURE BUT WITH  
SUPPORT CAN BE MANAGED  
AND CONTROLLED

USUALLY DEVELOPS IN  
ADULTHOOD

BUT CAN BE FOUND  
IN CHILDREN UNDER  
15 YEARS



### WHAT ARE THE COMPLICATIONS?

### WHAT ARE THE SYMPTOMS?



EXCESSIVE  
THIRST



FATIGUE AND  
WEAKNESS



FREQUENT  
URINATION



UNEXPLAINED  
WEIGHT LOSS



GETTING  
INFECTIONS  
FREQUENTLY



POOR  
EYESIGHT  
OR BLURRED  
VISION



OFTEN FEELING  
HUNGRY



GETTING INFECTIONS  
WHICH ARE HARD  
TO HEAL

### HOW IS IT SELF-MANAGED?



1. DAILY OFTEN MULTIPLE  
INSULIN INJECTIONS

3. METICULOUS ATTENTION TO  
TESTING AND MONITORING  
BLOOD GLUCOSE LEVELS

2. CONTINUOUS DELIVERY  
OF INSULIN WITH A PUMP

4. HEALTHY LIFESTYLE  
CHOICES



### HOW IS IT SELF-MANAGED?



1. GOOD WEIGHT CONTROL  
AND NUTRITION

3. HEALTHY  
LIFESTYLE CHOICES

2. MONITORING OF BLOOD  
GLUCOSE LEVELS

4. MAY REQUIRE ORAL MEDICATION  
AND INSULIN THERAPY AS THE  
CONDITION PROGRESSES

IF YOU OR SOMEONE YOU KNOW HAS DIABETES, DIABETES NZ IS HERE TO SUPPORT YOU

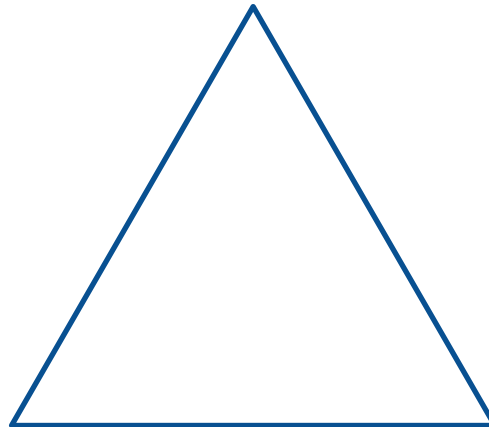
DIABETES.ORG.NZ

diabetes  
new zealand





# The balancing act





## New Zealand

- 250,000 diagnosed with diabetes
- 100,000 estimated to have pre-diabetes
- Maori 3 times more likely than non-maori
- 1 in 3 Pacific adults aged 45 yrs or over has diabetes



OF PEOPLE DIAGNOSED HAVE  
**TYPE 2**

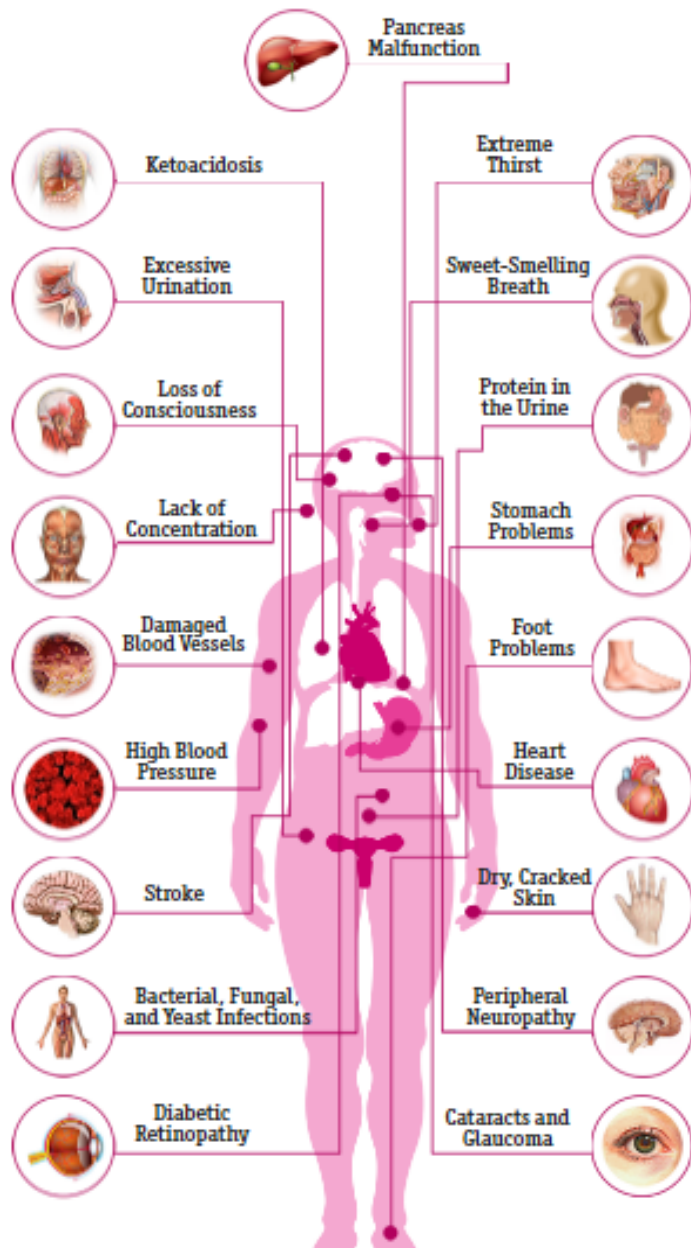
In many cases type 2 diabetes can be better managed through **physical activity** and a **healthy diet**.

**1 in 4** people in New Zealand are estimated to have **prediabetes**

**40** people in NZ diagnosed with diabetes **each day**



# The impact of diabetes



The physical impact of unmanaged diabetes can lead to heart attacks, strokes, kidney failure, blindness and amputations – over 600 lower limb amputations a year due to diabetes.

The estimated annual cost of diabetes on the New Zealand health system:

**\$2.1 billion**

The total direct health care costs for a person with diabetes are approximately three times those for people without diabetes.

An increasing number of people may not be able to continue working and the cost of this loss of productivity has been estimated as being more than direct health care costs.

# The Economic and Social Cost of Type 2 Diabetes

#CostofType2Diabetes

*An urgent health priority for  
Aotearoa New Zealand*



**diabetes**  
new zealand



**EDGAR DIABETES &  
OBESITY RESEARCH**  
A UNIVERSITY OF OTAGO **RESEARCH CENTRE**

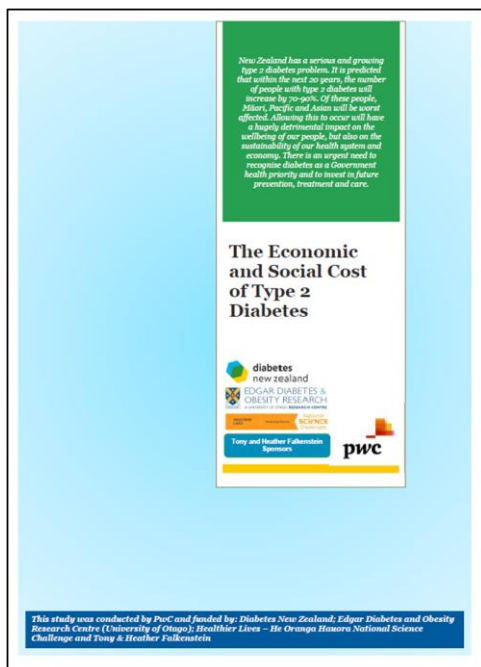
**HEALTHIER  
LIVES**

He Oranga Hauora

National  
**Science**  
Challenges

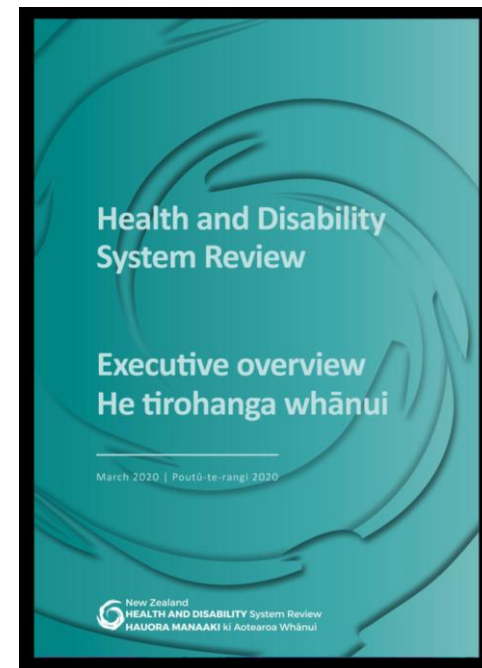
Tony and Heather Falkenstein – Sponsors

# Why we commissioned this report



Under the current national approach, the enormous human and economic cost of type 2 diabetes is **escalating rapidly**.

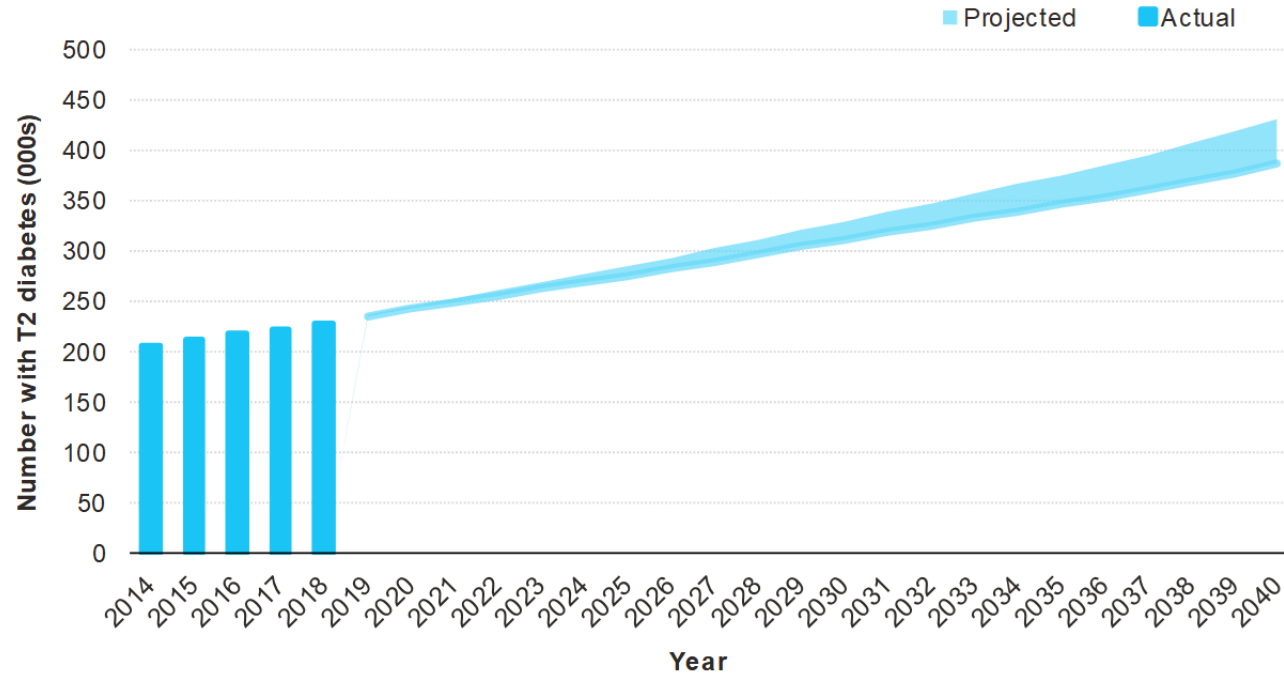
There is an opportunity to do things differently, which will **reduce cost** and lead to **more equitable and effective interventions**.





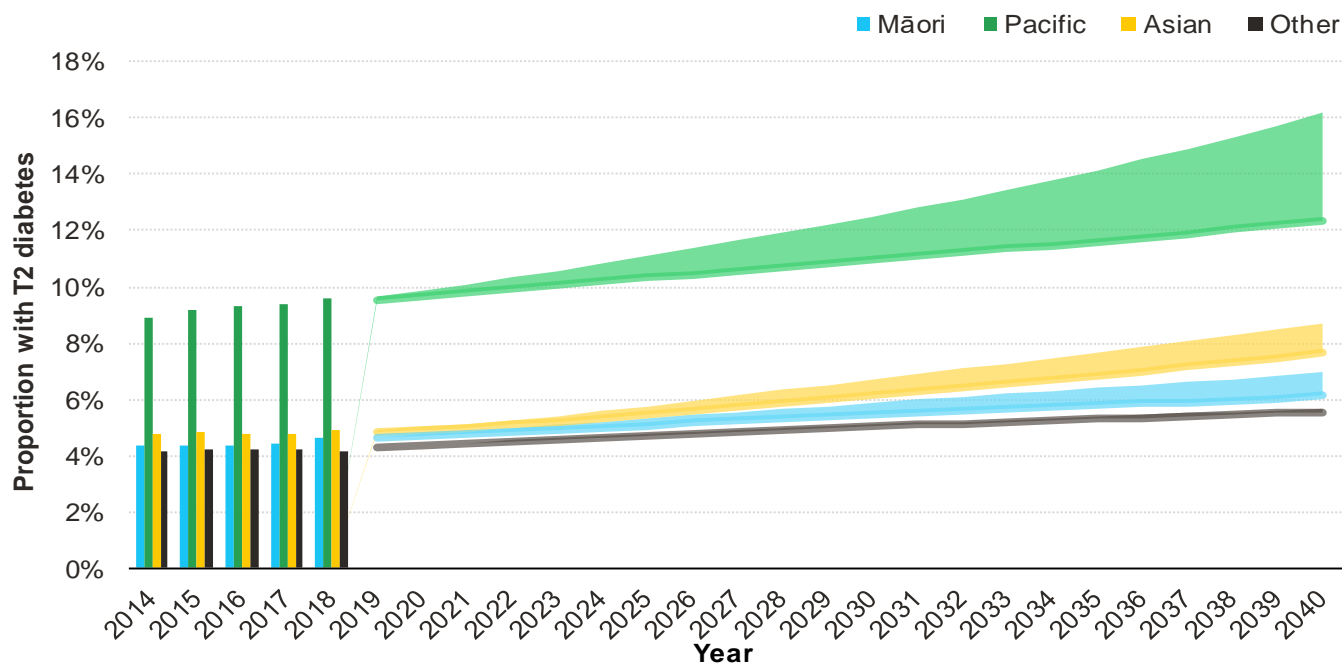
## The number of New Zealanders with type 2 diabetes is projected to increase by 70-90% in 20 years' time

Figure 13: Estimated number of New Zealanders with type 2 diabetes (2018-2040)



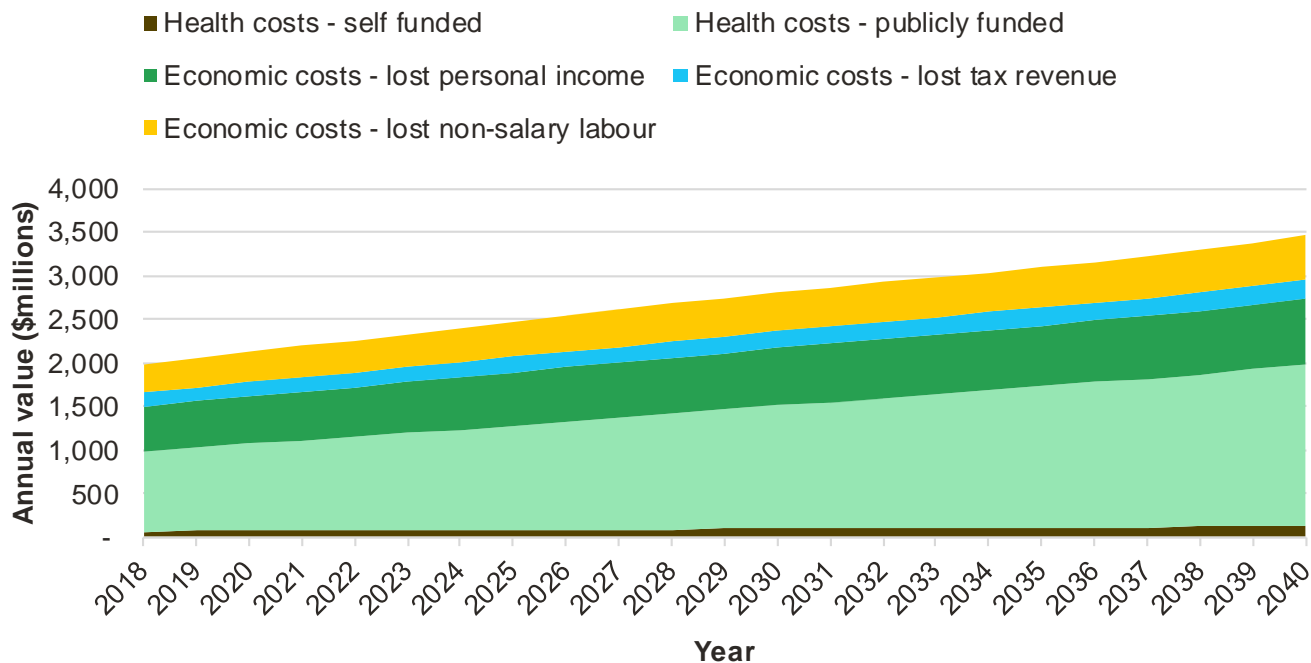
## Type 2 diabetes is projected to increase disproportionately amongst Pacific, Asian and Māori people

Figure 16: Estimated prevalence of type 2 diabetes by ethnicity (2018-2040)



## The annual cost of type 2 diabetes in New Zealand is a staggering 0.67% of GDP, and projected to rise by 63% over the next 20 years

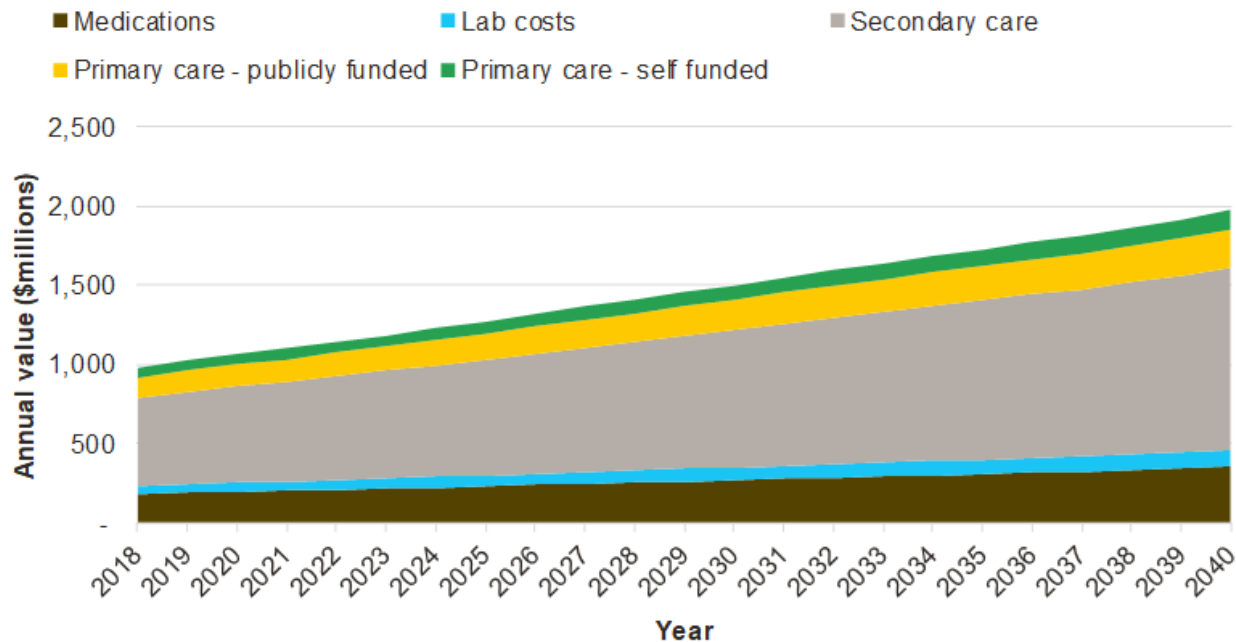
Figure 27: Total annual cost of type 2 diabetes in New Zealand





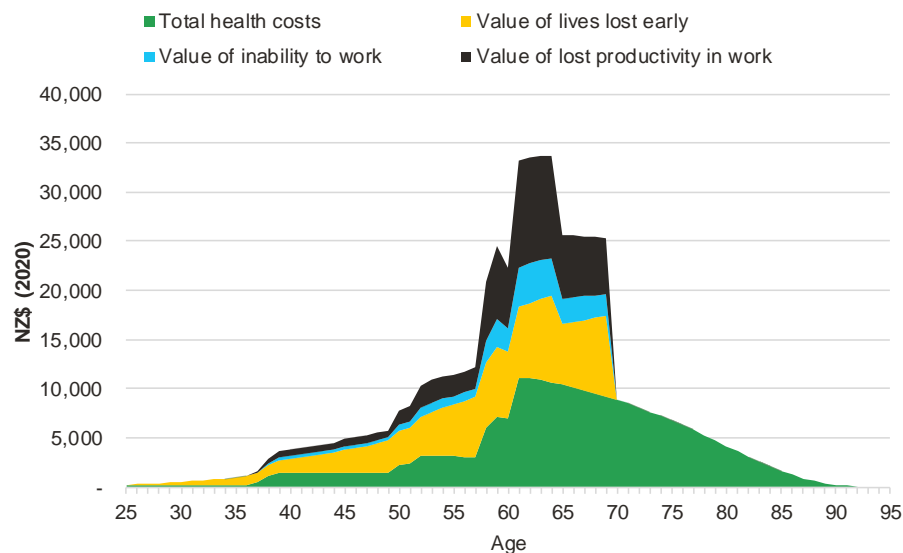
## The biggest cost to the public purse from type 2 diabetes is hospital (or secondary) care

Figure 28: Health cost breakdown of type 2 diabetes treatment and care (2018-2040)

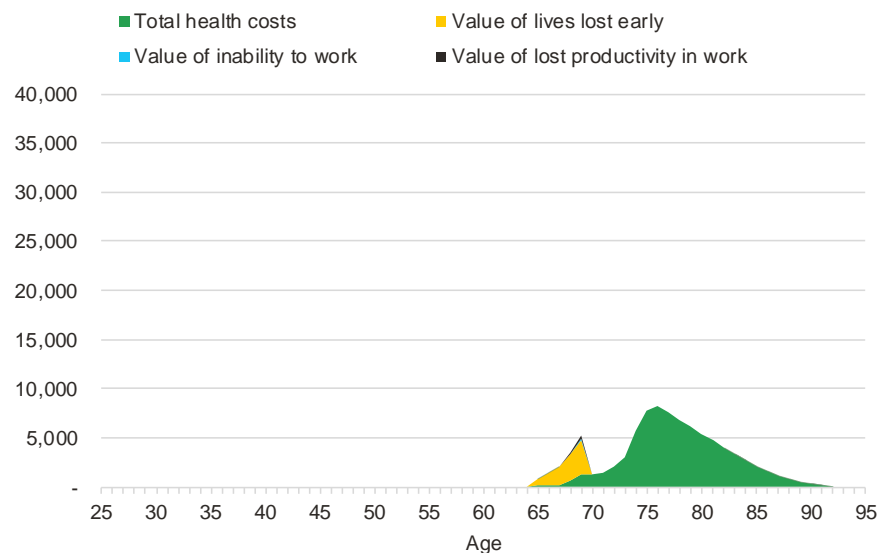


## Delaying the onset of type 2 diabetes results in huge cost savings

*Figure 39: Representative lifetime cost of type 2 diabetes beginning at **age 25** (\$565k)*



*Figure 43: Representative lifetime cost of type 2 diabetes beginning at **age 65** (\$90k)*



# So what can we do?



HEALTHIER  
LIVES

He Oranga Hauora

National  
**SCIENCE**  
Challenges

Tony and Heather Falkenstein –  
Sponsors





## 4 interventions that can make a difference

**Government benefit = \$42M**  
**Societal benefit = \$88M**

**Government ROI = 0.95**  
**Societal ROI = 2.95**

**390 major and 211 minor  
(601) amputations avoided  
annually**

**Net present value saving:**  
**Major amputation = \$40,654**  
**Minor amputation = \$36,505**

### Healthy People, Healthy Lives

*Lifestyle intervention to  
prevent development of  
type 2 diabetes*

### Owning our Futures

*Lifestyle intervention to  
achieve remission from  
type 2 diabetes*

**Government benefit = \$23M**  
**Societal benefit = \$63M**

**Government ROI = 0.97**  
**Societal ROI = 2.69**

### **SGLT inhibitors**

**Government benefit =  
\$510M Societal benefit =  
\$201M**

**Government ROI = 3.0**  
**Societal ROI = 4.2**

### **GLP-1 receptor agonists**

**Government benefit =  
\$595M Societal benefit =  
\$148M**

**Government ROI = 1.2**  
**Societal ROI = 1.5**

### Foot Screening and Protection

*Better foot screening and  
protection to avoid  
amputation*

### Better Diabetes Medications

*Gold standard medication  
to better manage type 2  
diabetes*

## What can we do right now?

There is an opportunity to **get immediate runs on the board** by piloting interventions shown to be of benefit.



foot screening



clinical nutrition therapy



intensive lifestyle change

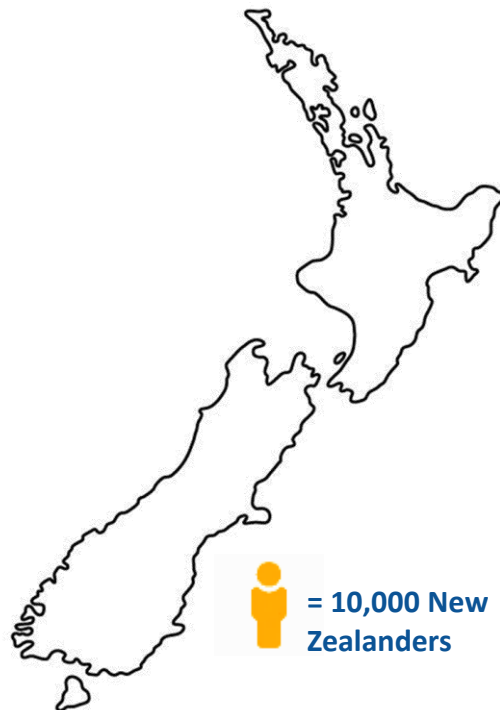
# We are not doing nearly enough!

We urgently need healthier food and physical activity environments for our population.

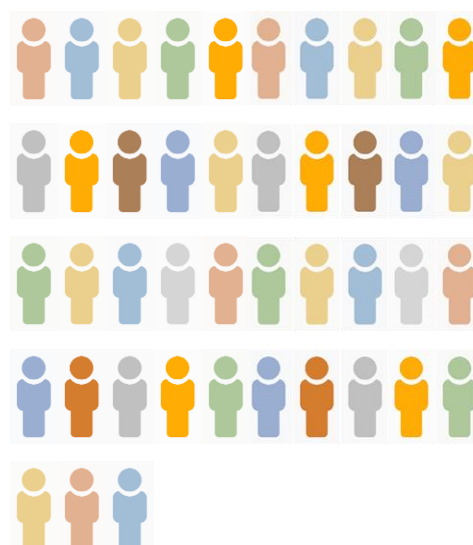


# Call to action

## TYPE 2 DIABETES NOW



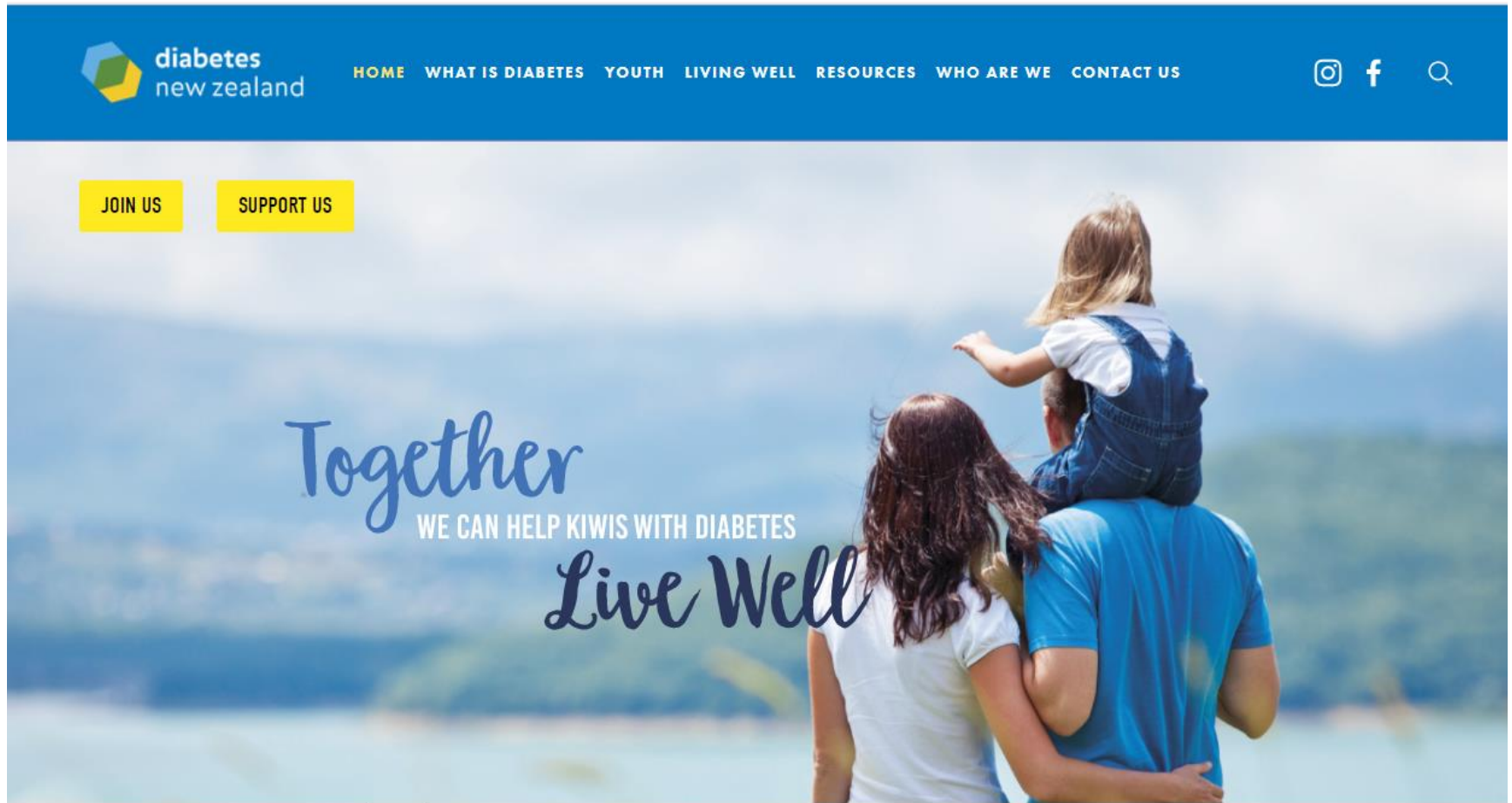
## TYPE 2 DIABETES IN 2040?







# Diabetes New Zealand



[www.diabetes.org.nz](http://www.diabetes.org.nz)