2024-25 PRE-BUDGET SUBMISSION

Diabetes Research

January 2024

diabetes australia

ads Australian Diabetes Society

ADEA Your trusted partner in diabetes care

About Us

Diabetes Australia, the Australian Diabetes Educators Association (ADEA) and the Australian Diabetes Society (ADS) represent 1.5 million Australians living with known, diagnosed diabetes; approximately 500,000 Australians living with silent, undiagnosed type 2 diabetes; and around 2 million Australians living with prediabetes; as well as their families and carers, diabetes healthcare professionals and researchers.

We are dedicated to reducing the incidence and impact of diabetes on people, health systems and society. We work with people living with, or at risk of diabetes, their families and carers, health professionals, researchers, funders, other diabetes organisations and the community to positively change people's lives.

For further information about this submission:
Taryn Black
Chief Strategy Officer
Diabetes Australia
M: 0409 504 524
E: tblack@diabetesaustralia.com.au





Diabetes Australia, Australian Diabetes Society and Australian Diabetes Educators Association acknowledge the Traditional Owners of the lands on which we live and work. We recognise their connection to land, waters and culture. We pay the utmost respect to them, their cultures and to their Elders past and present. We recognise that Australia is made up of hundreds of different Aboriginal and Torres Strait Islander peoples, each with their own culture, language and belief systems. Their relationship with country remains of utmost importance as it is the foundation for culture, family and kinships, song lines and languages.

DIABETES IMPACT IN AUSTRALIA

diabetes australia

1,463,772 people in **Australia** live with diabetes, that's **5.6%** of the population.

Impact on people

136,771
with type 1 diabetes

1,270,865
with type 2 diabetes

44,213
with gestational diabetes

960,383
with diabetes aged 60+

Impact on health

4,400
amputations in **Australia** per annum

111,247
are living with diabetes-related vision loss

966,090
are living with diabetes and heart disease

278,117
are living with diabetes and kidney disease

Impact on communities

731,886
will experience a mental health challenge per annum

585,509
living with silent, undiagnosed type 2 diabetes

161,015
hospitalisations resulting from diabetes per annum

3.4B
cost of diabetes in **Australia** per annum

Scan the QR code or visit **diabetesaustralia.com.au/wp-content/uploads/2023-Snapshot-Diabetes-in-Australia.pdf** to read the latest Snapshot Report about Diabetes in Australia.

Diabetes in Australia: The case for change

Over 1.4 million people with all types of diabetes are registered with the National Diabetes Services Scheme (as at 31 December 2023) including:



Type 1 diabetes:
136,771 (9%)



Type 2 diabetes:
1,270,865 (87%)



Gestational diabetes:
44,213 (3%)



Other diabetes:
11,923 (1%)

The diabetes epidemic is one of the largest and most complex health challenges Australia is facing.

In the 12 months to December 2023 114,811 people with diabetes were newly registered with the NDSS – equivalent to 315 new registrants every day.

These rates are likely to underestimate the number of Australians living with diabetes due to a range of factors, including that NDSS registration is voluntary and that there are an estimated 500,000 Australians living with undiagnosed type 2 diabetes[1].

The total number of people with diabetes in Australia could therefore be 2 million (or 7.5% of the total population).

In 2022, it was estimated that over 1.3 million hospitalisations were attributed to diabetes (accounting for 11% of total hospitalisations in Australia)[2]. Diabetes costs the Australian health care system $3.4 billion per annum[3].

Our 2024-25 budget proposals

This document is one of a series of three pre-budget submissions made by Diabetes Australia, the Australian Diabetes Educators Association and the Australian Diabetes Society. which call for:



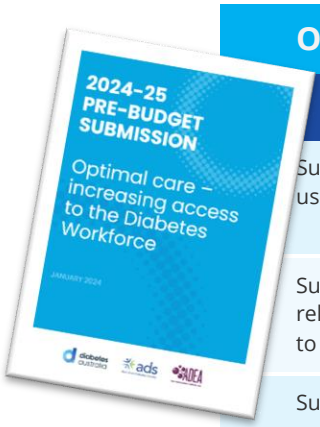
Diabetes Research

Priority Area	Key Action	Investment
Emergency funding for diabetes research	$10 million for 10 diabetes research laboratories	**$10m in 2024-25**
Medical Research Future Fund	Establish a Diabetes and Obesity Health Mission under the MRFF	**$270m over 10 years**



Diabetes in Australia

Priority Area	Key Action	Investment
Expand and improve access to life saving technology for people living with all types of diabetes	Pilot programs expanding access to continuous glucose monitoring for high risk people with type 2 diabetes who use insulin	**$4.5m over two years**
Intervene early to detect diabetes-related kidney disease	Establish a National Diabetes Kidney Disease Screening Program	**$1.8m over two years**
Reduce the number of Australians developing Type 2 diabetes	Develop a national diabetes prevention phone line	**$4m over three years**
Provide more support for Aboriginal and Torres Strait Islander children with type 2 diabetes	Expand and adapt *Diabetes in Schools* to support Aboriginal and Torres Strait Islander children living with type 2 diabetes	**$1.2m over two years**
Ensure the National Diabetes Strategy improves prevention, treatment and support for all people living with diabetes	Release a funded implementation plan	



Optimal Care – increasing access to the Diabetes Workforce

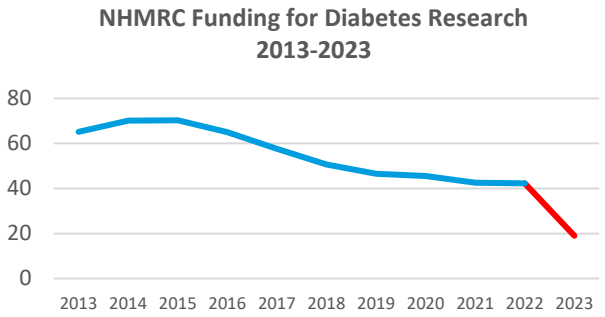
Priority Area	Key Action	Investment
Supporting people with diabetes to effectively use diabetes management technology	MBS funding for the initiation and support of diabetes technology from a Credentialled Diabetes Educator	**$1.1m per annum**
Supporting people at increased risk of diabetes-related complications by providing greater access to CDEs and the multi-disciplinary care team	5 CDE visits for those most at risk of diabetes-related complications	**$30m over three years**
Supporting women with gestational diabetes, to prevent complications and lessen the risk of type 2 diabetes for parent and child	3 CDE visits during pregnancy, and two visits during the postpartum period.	**$14m per annum**

A crisis in diabetes research funding

Research into the causes, complications and cure for all types of diabetes is critical in the fight to combat the diabetes epidemic.

Australia's diabetes researchers and research institutes are world class. They are focussed on a better understanding of the complexity of all kinds of diabetes and new life-changing treatments, but their progress is limited by a lack of funding.

Funding for diabetes research in Australia has declined by more than 35% over the past 10 years while the number of people living with diabetes increased by 32%.



Alarmingly, in 2023 NHMRC provided only $19 million to diabetes research, which is less than half of the amount provided in 2022.

This funding decline has brought diabetes research to a dire state in Australia. Some diabetes researchers are now concerned that critical research to address one of Australia's major health priorities will not be able to continue beyond the next 12 months. If we are to find a cure for diabetes and improve treatment for its complications, it is imperative that diabetes research funding increases and continues.

Economic analysis shows medical research delivers a return of almost $4 for every dollar invested[4]. We anticipate that the return on investment for diabetes research is even higher. This return is generated through better treatments that reduce the impact of serious complications, and prevent or reduce hospital admissions and primary healthcare visits. Research breakthroughs can also improve workforce productivity and provide opportunities for Australian businesses to commercialise the results of research.

NHMRC expenditure ($ million) by former national health priority areas 2013 to 2022

Priority Areas	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Arthritis/Osteoporosis	23.7	22.7	24.7	19.0	18.9	17.5	18.3	16.1	14.8	16.0	
Asthma	21.5	23.6	22.7	15.3	13.3	15.7	13.8	13.3	14.1	12.5	
Cancer	179.2	188.3	191.4	170.6	175.8	178.9	181.6	170.2	153.7	158.9	
Cardiovascular disease	117.1	129.4	130.0	114.9	111.4	105.3	112.6	107.6	102.5	97.5	
Dementia	24.9	31.5	33.0	45.6	50.2	60.9	71.2	64.1	55.3	51.5	
Diabetes	**65.2**	**70.2**	**70.3**	**65.0**	**57.7**	**50.7**	**46.5**	**45.6**	**42.6**	**42.3**	↓ 35.1%
Injury	45.4	58.4	61.5	45.8	44.2	49.9	51.1	49.8	46.6	49.8	
Mental health	85.1	95.9	100.0	91.1	93.4	104.9	110.2	103.9	102.3	100.8	
Obesity	41.7	40.7	39.0	28.1	27.6	23.0	23.5	24.3	23.1	20.0	

2024-25 Budget Proposals

Our proposals complement submissions made by other health and diabetes organisations, such as JDRF who are seeking an extension for the successful Type 1 Diabetes Clinical Research Network. Our proposals support research into all types of diabetes.

$10 million in emergency funding for diabetes research

Diabetes Australia and the Australian Diabetes Society are aware of researchers at major universities and research institutions who are at risk of needing to close their labs due to funding shortfalls. This is despite **consistently outstanding outcomes and recognition for Australian diabetes researchers internationally.**

Australian research projects cover important studies into topics such as insulin resistance, chronic kidney disease, gestational diabetes and diabetes-related foot disease.

Across the country there is potentially life-changing research being undertaken:

- Dr John Karas is investigating the development of an oral insulin.
- Associate Professor Melkam Kebede is studying how insulin is manufactured and stored in the pancreas, which could lead to new treatments for type 2 diabetes.
- Researchers are using screening programs to determine if children are at risk of developing type 1 diabetes.

In December 2023, the Australian Diabetes Society convened a National Diabetes Research Taskforce meeting in Melbourne. It was attended by some of the most highly regarded diabetes researchers in Australia, including representatives from JDRF, Research Australia, Endocrine Society of Australia, Australasian Diabetes in Pregnancy Society, Australian and New Zealand Society of Paediatric Endocrinology and Diabetes, the Australian and New Zealand Society for Obesity and the Royal Australian College of Physicians. Attendees expressed alarm at the continuing decline in diabetes research funding, and agreed that urgent, immediate action is required to halt and reverse this decline. While long-term strategic steps are required, there is a pressing need for immediate action to protect critical ongoing research.

$10 million, shared between ten research laboratories, would immediately inject much-needed emergency funding to keep critical research moving forward to improve the lives of people living with diabetes.

The diabetes sector can assist Government to prepare a framework for funding that meets the government's research objectives. We could work in partnership to call for expressions of interest from diabetes researchers at greatest risk, who are conducting research that is critical to our understanding of the causes and consequences of diabetes. The government would then identify ten research projects to receive urgent funding in the 2024-25 financial year.

We estimate that there are approximately 27 research labs currently at risk of closure due to funding restraints. A $10 million emergency funding injection would enable the continuation of some of that research and, critically, would provide immediate relief for diabetes research in crisis.

Establish a Diabetes and Obesity Health Mission under the MRFF

The next key step towards sustainable diabetes research funding is to establish a Diabetes and Obesity Mission under the MRFF.

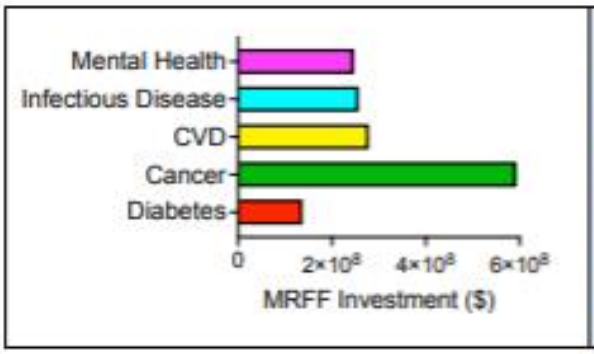
The Mission would improve health and productivity, and save lives by mobilising and coordinating research efforts, supporting a vibrant and sustainable workforce and developing collaborative and translational platforms. It would generate world-class outcomes and encompass broad innovations to benefit all Australians, with particular effort to improve equity and outcomes for Aboriginal and Torres Strait Islander people and other vulnerable groups disproportionately impacted by diabetes and obesity.

Fundamentally, a specific mission for diabetes and obesity would ensure that these critical areas of research receive sufficient coordinated funding to deliver outcomes that will benefit the millions of Australians with these conditions. Such an investment would also support the growth in Australia's research capacity and talent into the future.

The goals of the Mission are specifically:

- Reducing the number of Australians of all ages affected by diabetes and obesity
- Decreasing the impact of diabetes and obesity on all those affected across their life-course
- Understanding risk factors responsible for the development of diabetes and obesity
- Improving outcomes from acute and chronic complications of diabetes and obesity
- Ensuring that the best technologies, medicines and care are equitably available to all Australians with diabetes and obesity based on the best available evidence.
- Informing health policy and public health interventions for diabetes and obesity

Substantial work has been undertaken to model what the governance and structure of the Mission could entail. Attached is a submission that was previously made to the Parliamentary Inquiry into Diabetes which provides much of that detail. The submission proposes an investment of **$270 million over 10 years** to support the Diabetes and Obesity Mission under the MRFF.



The Medical Research Future Fund (MRFF) actual awarded dollars were calculated from year by year data since inception (Figure 3, left, %) and show a complete disparity in equitable funding made available for research to benefit people at risk for/or living with diabetes [10]. CVD - cardiovascular disease.

Diabetes research changes lives

Diabetes research has transformed the lives of people living with all types of diabetes.

People like 33-year-old Tanya who lives with type 1 diabetes and whose quality of life has 'skyrocketed' since she was diagnosed in 2002 thanks to advancements in technology.

Tanya's life has been changed by technology research that led to Continuous Glucose Monitoring and insulin pumps. Tanya experienced a completely healthy pregnancy prior to the birth of her daughter as a result of these technologies and other research that has been undertaken into areas such as diet for people with diabetes and managing the risk of complications. Tanya has seen diabetes management and technologies improve drastically during her lifetime.

Research is the only way to ensure that this continues.

Diabetes research provides hope for the millions of people living with diabetes.

The next groundbreaking discovery could be just around the corner but immediate funding is needed to ensure Australia's world-class diabetes researchers can continue their vital work.





References

1 Sainsbury, E. et al. (2020) 'The diagnosis and management of diabetes in Australia: Does the "Rule of halves" apply?', Diabetes Research and Clinical Practice, 190, p. 108524. Doi:10.1016/j.diabres.2020.108524

2 Australian Institute of Health and Welfare. Diabetes: Australian Facts https://www.aihw.gov.au/reports/diabetes/diabetes/contents/about

3 Australian Institute of Health and Welfare. Diabetes: Australian Facts https://www.aihw.gov.au/reports/diabetes/diabetes/contents/summary

4 Rynne B and Schilling C (2018) Economic impact of medical research in Australia. KPMG. Sydney. https://aamri.org.au/wp-content/uploads/2018/10/Economic-Impact-of-Medical-Research-exec-summary.pdf

Appendix 1: Australian Diabetes Society Research Submission to the Parliamentary Inquiry into Diabetes (2023)

