

The Berlin Declaration

A collective ambition for policy change to drive early action in type 2 diabetes

In partnership with:



International
Diabetes
Federation



primary care diabetes europe



Supported by:



Disclaimer This document has been funded by AstraZeneca, and written in collaboration with other partner organisations.





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Foreword

In less than one year, the *Early Action in Type 2 Diabetes* initiative has spread to more than 30 countries around the world. The idea of engaging with decision-makers on early action, helping them to recognise the urgency of taking action as early as possible and implementing policies that achieve this for as many people as possible, has received significant support and impressive momentum.

The *Early Action in Diabetes* initiative – a multi-year, multi-stakeholder collaboration – was started in 2015, instigated and funded by *AstraZeneca*, in partnership with the *International Diabetes Federation* and *Primary Care Diabetes Europe*. The initiative was established to drive tangible, local action to implement policies that focus on the four pillars of Early Action: **Prevention, Early Detection, Early Control** and **Early Access to the right interventions**.

In 2016, global experts volunteered to participate in one of four *International Working Groups*, each tasked with reviewing the latest best practice in policy making in each of these four areas, and to consolidate these findings into a single document – the Berlin Declaration that you are reading now. The groups, consisting of international experts from 11 countries around the world, have been meeting during 2016 to debate the issues and identify the key early action principles across all four pillars that need to be adopted now, to drive improvements in patient outcomes.

This Declaration is published with the support of the Early Action partnership, further strengthened this year by the addition of the *World Heart Federation* and also supported by *German Diabetes Aid*, signifying the growing international momentum behind this initiative. The Declaration's purpose is to help countries narrow their focus on the policies most likely to benefit their populations, supporting them to measure progress as part of an international catalyst for change that seeks to truly transform people's lives.

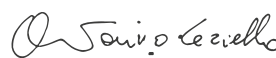
With an estimated 14,000 people dying as a result of diabetes and its complications every day¹, time cannot be wasted in closing the gap between evidence, policy and practice. To ensure each country benefits from the lessons learned and inspirational case studies already identified around the world, we urge you to join your peers in signing up to the principles outlined in this Declaration, and supporting the implementation of Early Action policies in your country.



Rick Blickstead
President and CEO,
Canadian Diabetes
Association



**Professor
Margaret McGill**
Associate Director,
Diabetes Centre, Royal
Prince Alfred Hospital



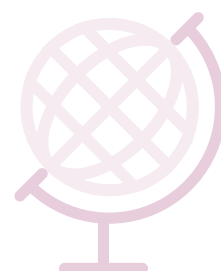
**Professor
Antonio Ceriello**
Head of Diabetes
Department, IRCCS
MultiMedica







Professor Itamar Raz
Head of the Center
for the Prevention of
Diabetes, Hadassah
Hebrew University

International working groups

The Berlin Declaration has been written based on the findings of the four International Working Groups on Early Action in type 2 diabetes. These groups were established at the Global Diabetes Policy Summit in Barcelona in 2015, and each of them convened at least twice between May and July 2016. This document is the product of their discussions, global expertise and country-level experiences.



International Working Groups membership

Prevention 	Early detection 
<p>Rick Blickstead – Chair</p> <p>Dr Francesc Xavier Cos</p> <p>Professor Gerardo Medea</p> <p>Professor Alexandre Hohl</p> <p>Professor Stephen Colagiuri</p>	<p>Professor Margaret McGill – Chair</p> <p>Dr Denise Franco</p> <p>Rick Blickstead</p> <p>Professor Gerardo Medea</p> <p>Dr Nabil Sulaiman</p> <p>Professor Kamlesh Khunti</p>
Early control 	Early access to the right interventions 
<p>Professor Antonio Ceriello – Chair</p> <p>Dr Augusto Pimazoni-Netto</p> <p>Dr Sergio Zúñiga-Guajardo</p> <p>Professor Avraham Karasik</p> <p>Dr Sanjay Kalra</p> <p>Dr Nicky Lieberman</p>	<p>Professor Itamar Raz – Chair</p> <p>Dr Mohamed Farghaly</p> <p>Professor Nebojsa Lalic</p> <p>Dr Fernanda Thome</p> <p>And other members</p>

The need for political action

Politicians and policy makers around the world recognise that the world is in the grip of a global crisis in type 2 diabetes², and that this is having a devastating impact on lives and economies. Yet, despite this acknowledgement and the recognition that national strategies are required, not enough is being done to stem the tide of this “health catastrophe” through the implementation of effective policies³.

- Globally, 1 in 11 adults currently has diabetes, costing health systems 12% of their total expenditure¹. By 2040, the global number of people living with diabetes is expected to rise by 227 million – 10.4% of the population – increasing health system costs by \$129 billion¹
- Losses in GDP worldwide from 2011 to 2030, including both direct and indirect costs of diabetes, are projected to total \$1.7 trillion⁴
- The number of people living with prediabetes, a high risk state for diabetes, is increasing. By 2040, it is estimated that over 480 million people will live with prediabetes globally, an increase of over 50% from 2015 levels¹
- Over 90% of cases are of type 2 diabetes, many of which are preventable⁵
- Almost half of the total diabetes population are not aware they have it¹
- By the time people with type 2 diabetes receive a diagnosis, as many as half have already developed one or more complications⁶
- Poorly controlled diabetes can increase the risk of cardiovascular disease, blindness, kidney failure, amputations and premature death. In 2015, 5 million deaths were attributed to diabetes¹. It is estimated that up to 70% of all lower limb amputations are related to diabetes⁷
- Globally, every six seconds, a person dies from diabetes¹





What is predicted to happen if we do not take action now?

From the International Diabetes Federation Atlas 2015 ¹	2015	2040
Adults living with diabetes (20–79 years)	415 million	642 million
Cost of treating adults with diabetes (20–79 years)	\$673 billion	\$802 billion
Number of adults living with impaired glucose tolerance, or ‘prediabetes’	318 million (6.7% of the total population)	481 million (7.8% of the total population)

The Four Pillars of Early Action are firmly rooted in the evidence base on what is most valuable in reducing the economic, societal and personal burden of type 2 diabetes:

Prevention

Taking steps to prevent people from developing type 2 diabetes from the outset



Early detection

Identifying those at high risk of developing type 2 diabetes and diagnosing them as early as possible



Early control

Ensuring that people with diabetes are given the treatment and support they need to achieve good control of their blood glucose levels as early as possible, to reduce the risk of complications



Early access to the right interventions

Ensuring that health systems are addressing the need for equitable, early access to the personalised education, lifestyle change programmes and treatments that people with type 2 diabetes need



The International Diabetes Federation has completed extensive work analysing the disastrous impact diabetes will have by 2040 if trends continue as they are¹. With numbers continuing to rise, it is clear that current policies are not doing enough to tackle the problem at the root, before diabetes and its related complications set in and devastate lives, health systems and economies. To truly tackle this global crisis, each country must commit to implementing policy to support Early Action in type 2 diabetes.

What is the Berlin Declaration?

Excellent work has been started at an international level by the United Nations, the World Health Organization and the European Parliament, to raise awareness of the challenge and initiate action^{8,9}. We also know that in several countries, national plans are already in place to try to tackle the burden of type 2 diabetes.

The Berlin Declaration seeks to build on this work by supporting the development and implementation of tangible, action-oriented targets in the short, medium and long term that drive early action in type 2 diabetes. Where effective national plans are in place, we encourage the Berlin Declaration to be used as inspiration for implementation, translating the evidence into action. Where they are yet to be formed, the Declaration can be used to inform a robust plan based on international best practice, to ensure that these ambitions are translated into actions that touch the lives of people in each nation¹⁰.

To assist policy makers in this process, the Berlin Declaration has been created by a partnership of organisations, supported by world-class diabetes experts, committed to the cause of Early Action.

Key aims of the Berlin Declaration

Taking into consideration local cultural, social and economic differences, the aims of this Declaration are to:

- Outline the key early action principles that each country should work towards to reduce incidence, and improve the lives of people with type 2 diabetes
- Offer inspiration and advice on the type of policies that should be – and in some places have been – implemented
- Focus attention on a small number of achievable, measurable early action targets to monitor progress and ensure that patient centred change is being delivered



Can a declaration be universally applicable?

This Declaration is at the same time a challenge and an inspiration for change. It will be a global call to action for policy makers to act on the gaps we know exist. It will neither blame nor point fingers, but rather provide inspiration and tangible guidance, making it easier for all stakeholders involved to take the right decisions for people with diabetes.

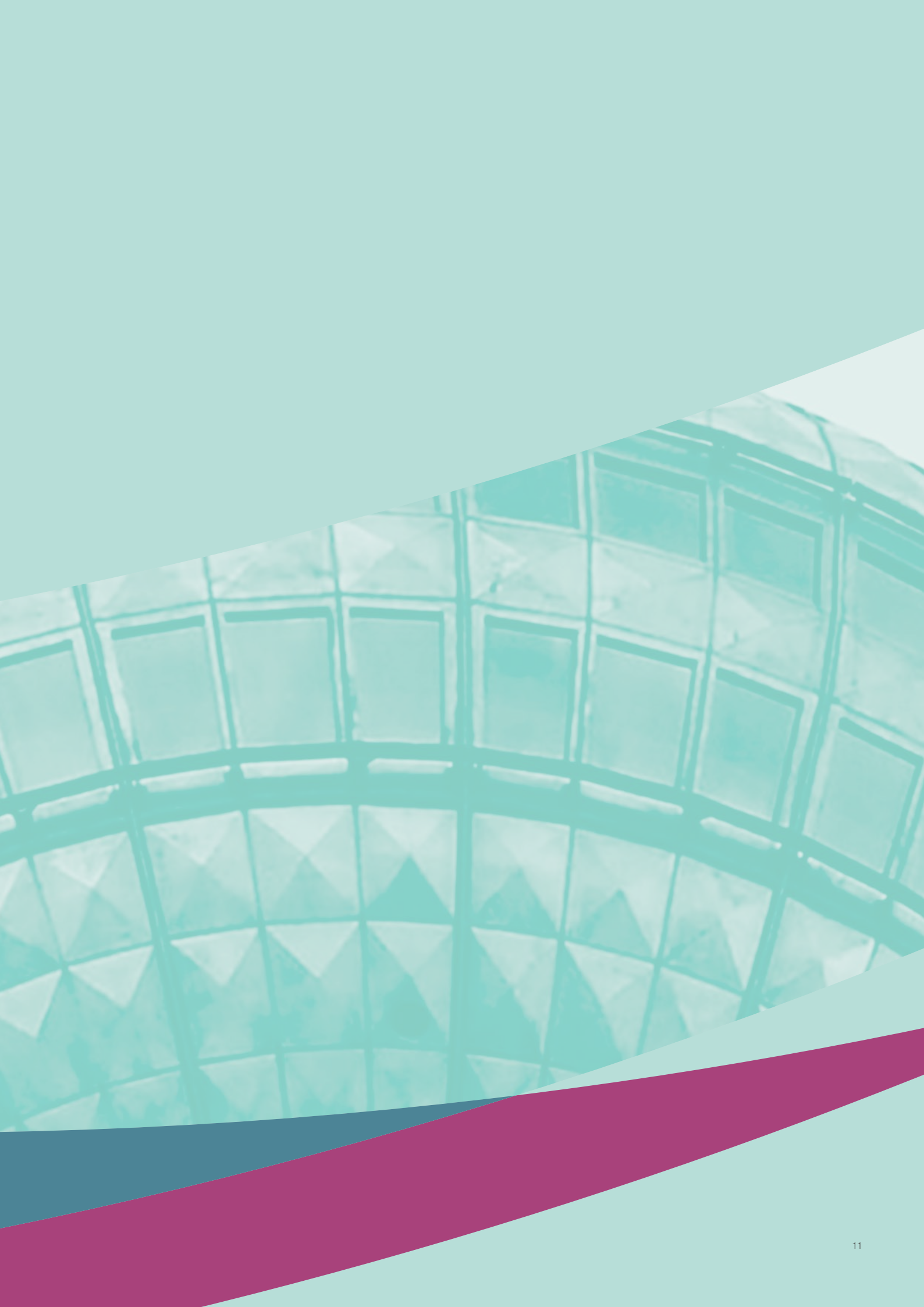
Experts from a range of very different countries have developed the Berlin Declaration based on principles gathered through their own experience that are likely to be applicable elsewhere, in other countries, cultures and systems. International in its scope, the Declaration is therefore relevant to all nations, regardless of their different environments. While each country is different, the Declaration can be used to foster an environment which will allow localised, national plans to take root and deliver change.

How can we ensure that the Berlin Declaration will have a positive impact for people with diabetes?

The partners have committed to work towards the implementation of this Declaration. This includes driving the delivery of action on the ground and reconvening in 2017 in Rome to discuss progress. In this way, this initiative is unique in supporting national advocates at both a local and international level. However, within this framework, the importance of national champions and the involvement of all stakeholders is paramount to its success in transforming the lives of people with, and at risk of, diabetes.

Policies must be implemented in each and every country to support early action in type 2 diabetes to truly change the course of this global crisis.

Early action – The core of the Berlin Declaration



Prevention

Taking steps to prevent people from developing type 2 diabetes from the outset.

What is the imperative to act?

Unless we take action:

- The number of people living with diabetes will continue to rise, reaching 642 million by 2040. This means that one in ten people will have diabetes by 2040¹
- Diabetes spending by health services will increase by almost 20% by 2040 at the latest – money that could be spent in other ways¹

What could success in prevention look like?

- By 2025, to halt the rise in diabetes and obesity, in line with the World Health Organization's vision from 2013⁹
- By 2030, a global reduction in premature mortality from diabetes of one third, through prevention and treatment, in line with United Nations' Sustainable Development Goal 3.4⁸

What targets should be set to assess progress by 2020?

- A 10% decrease in the sugar in individual diets of the population
- A 50% increase in the proportion of the population consuming at least five portions of fruit and vegetables per day, in line with the World Health Organization's global action plan for the prevention and control of non-communicable diseases^{9,11}

All local targets should be monitored by incorporating relevant measures into national public health data collection and monitoring.

What policies should be implemented?

- **A comprehensive national diabetes prevention strategy**, focussing on both children and adults separately, covering education, nutrition and exercise for the general population, which all countries should implement as a minimum. Countries with more resources available should set their ambitions even higher
- **A diabetes prevention programme** to provide lifestyle advice to those with impaired glucose tolerance or 'prediabetes'
- **A tax on sugar-sweetened beverages.** The state must treat unhealthy diets in the same way that many governments treat smoking, using tobacco control measures as a precedent for delivering behaviour change by legislation. These measures might also include tax increases and restrictions on advertising foods that are high in sugar, refined carbohydrates and saturated fat; as well as subsidies for fresh fruit and vegetables
- **Local government tasked with driving prevention** by modifying urban environments and local food environments, with autonomy over its approach in applying local measures to promote healthy lifestyles, including regulation of local businesses and town planning



What can be done to make policies more likely to succeed?

- Preventive interventions should start as early as possible in order to allow a wide variety of relatively low- and moderate-intensity programmes¹²
- Complex needs of population groups such as indigenous people and those with specific socio-economic needs must be addressed in any population-level policies, as normal barriers to behaviour change can often be amplified in such groups. This has been seen in Australia where prevalence of type 2 diabetes is higher among indigenous people, and where this is higher again in remote populations as compared to urban indigenous populations¹³
- Collaboration must be fostered between key stakeholders such as community leaders, primary care physicians, and policy makers to prevent plans from reaching barriers at different levels of the system
- A realistic view of how much funding is needed to deliver impact with prevention initiatives must be taken, acknowledging that significant upfront investment may be required, or that policies may only be funded through levies or reductions elsewhere
- Making a unique case for diabetes with policy makers is key, and decision makers who themselves have diabetes should be engaged. Where buy-in for diabetes-specific policies is particularly weak, broader initiatives that collaborate across disease areas with similar risk factors and comorbidities could help to improve the likelihood of political interest in diabetes
- All prevention policies should be collaborative across sectors and services, and linked to every aspect of daily life that could be improved by promoting healthier lifestyles and physical activity. Departments or organisations responsible for implementation must be outside of the political cycle to prevent the content and its delivery being politicised or impacted by elections
- Enable a food-labelling system that is easy to understand and that targets consumer attention and decision making in favour of healthy products, such as using colour coding or a five-star system¹⁴

Prevention

Case studies demonstrating how this can be achieved



Canada

What will they do?

The Making Healthier Choices Act will be enforced on 1 January 2017 in Ontario, requiring any food service establishment with 20 or more locations in the province to display the number of calories on their menus¹⁵

What will the impact be?

According to Dr Isra Levy, Ottawa's Medical Officer of Health, "the posting of calories for food and beverage items on menus will empower Ottawa residents to make healthier food choices and raise their awareness of the calories they take in, relative to the calories they need"¹⁶



Italy

What are they doing?

In 2006, the PASSI project was established to help monitor the performance of the National Prevention Plan, using continuous surveillance of the adult Italian population (18-69 years)^{17,18}

What was the impact?

Through a web portal, the PASSI Project now provides the government, users and providers of care with detailed data on the prevalence, characteristics and geographic distribution of diabetes, intelligence on current risk factors such as physical inactivity, unhealthy diet, smoking, alcohol and cardiovascular risk, and information on current therapy practices^{17,18}



Australia

What are they doing?

Steps have been taken to raise awareness of the link between dementia and diabetes to capitalise on the public and political interest as a way to raise awareness of the need for prevention^{19,20}

What was the impact?

In 2013, Alzheimer's Australia Vic commenced work on the type 2 diabetes and dementia toolkit, which includes a manual for people working in a community setting, a consumer information booklet and individual support tools²⁰. Alzheimer's Australia National CEO Carol Bennett further stressed the importance of recognising the links between diabetes and dementia during National Diabetes Week 2016¹⁹



USA

What are they doing?

The US National Diabetes Prevention Plan provides an infrastructure to facilitate collaboration among federal and state government agencies, community-based organisations, employers, insurers, healthcare professionals, academia, and other stakeholders to prevent or delay type 2 diabetes. Based on the US Diabetes Prevention Program (US DPP), the National Diabetes Prevention Program facilitates the participation in lifestyle change programmes to reduce the risk of type 2 diabetes of people with prediabetes²¹

What was the impact?

Outcomes of the National Diabetes Prevention Program are expected to be comparable to the US DPP outcomes ($\leq 58\%$ risk reduction of developing diabetes due to lifestyle interventions)^{22,23}



Spain

What are they doing?

The DEPLAN (Diabetes in Europe—Prevention using Lifestyle, Physical Activity and Nutritional intervention), is an active real-life primary care lifestyle intervention which was developed in Catalonia. Its feasibility and effectiveness in preventing type 2 diabetes within the Spanish primary care setting was assessed in 2012. The primary outcome measured was the development of diabetes according to WHO criteria²⁴

What was the impact?

Intensive lifestyle intervention was shown to be feasible in a primary care setting and to significantly reduce diabetes incidence among high-risk individuals. During a 4.2-year median follow-up, a 36.5% relative risk reduction was established through intensive lifestyle intervention²⁴. The DP-TRANSFERS (diabetes prevention transferring findings from European research to society) project is aimed at transferring the DEPLAN to daily clinical practice and to make it accessible in primary healthcare settings



Mexico

What are they doing?

A tax of 1 peso/L on sugar sweetened beverages was introduced in Mexico in 2014²⁵

What was the impact?

The introduction of the tax resulted in the average person purchasing 4.2 fewer litres of sugar-sweetened drinks in the first year. The average volume of taxed beverages purchased monthly was 6% lower in 2014 than would have been expected without the tax²⁵

Early detection

Identifying those at high risk of developing type 2 diabetes and diagnosing them as early as possible.

What is the imperative to act?

- Almost half of the total population with type 2 diabetes are not even aware they have it¹
- By the time people with type 2 diabetes receive a diagnosis, as many as half have already developed one or more complications⁶
- 74.7% of deaths among patients with prediabetes occurred after progression to type 2 diabetes²⁶
- While age is a strong risk factor for developing type 2 diabetes, a greater number of people are getting diagnosed younger²⁷, with potentially more scope to change behaviour at this younger stage in life

What could success in early detection look like?

- By 2025, a 25% reduction in the frequency of diabetes-related complications detected at diagnosis
- By 2025, a 25% reduction in the number of patients with an HbA1c level of 7% or above at diagnosis

What targets should be set to assess progress by 2020?

- A 50% increase in the number of people taking a risk test for type 2 diabetes
- A 50% increase in the number of primary care professionals being trained in diabetes detection
- A 50% increase in the number of primary care professionals offering a risk test for type 2 diabetes
- A 50% increase in the number of high risk patients being tested for type 2 diabetes

What policies should be implemented?

- **A national screening programme for type 2 diabetes.** The specifics of this may vary depending on national prevalence and risk factors, but as a minimum it would include systematic and proactive assessment of at risk individuals, alignment with services that provide care for diabetes-related complications, capacity planning for increase in referrals and collection of data on numbers screened and diagnosed
- **A validated screening risk assessment tool (or small number of tools)** agreed in each country to identify people at risk of developing type 2 diabetes and consistently monitor the data. This should be freely accessible online and in health, workplace and community settings, as well as tailored to reflect all ethnic groups in the country. Organisations such as the International Diabetes Federation can support this at an international level, using their communication-channels to promote standardised risk tools, in addition to setting international targets for countries to work towards



What can be done to make policies more likely to succeed?

- The economic impact of screening must be effectively analysed as policies are introduced. Only screening for at risk groups should be entrenched in policy as population-level screening has not been shown to be cost-effective²⁸. A simple cost-effectiveness plan outlining 'upfront cost' versus 'cost of complications' should be included to secure buy-in. It is also essential that services are planned to support the likely increase in the number of people who will be diagnosed, with close attention paid to sustainable capacity planning and investment
- A national review of diabetes detection training should be conducted to ensure it is in line with international best practice and national screening policies and that all opportunities to diagnose diabetes early are maximised
- Primary care professionals – who diagnose most cases of type 2 diabetes – must be encouraged and incentivised to prioritise diabetes screening, despite being tasked with addressing multiple health problems in consultations lasting only a few minutes²⁹. Emphasis must be placed on diabetes in its own right, rather than being grouped with other non-communicable diseases where its seriousness may be diluted
- Accurate estimates of the number of people living with, and at high risk of, diabetes must be established in order to plan services. This should go hand in hand with calls for earlier diagnosis and should be used to make the case for cheaper upfront investment (in lifestyle changes) versus more expensive complications
- Stigma must be overcome so that those who have type 2 diabetes in particular are not apportioned 'blame' for their condition, as this can negatively affect the way that they engage with their risk factors and prevent them from seeking a diagnosis³⁰. A common global phraseology and key messages should be adopted to ensure communication around screening is consistent and supports a constructive solution, rather than ratifying the stigma. A slogan such as "Diabetes is common – get in early, get checked" could be used, with key messages such as "Early detection and treatment will improve your quality and quantity of life"
- Harnessing people power and driving change from the ground upwards is vital, based on the human impact of the disease including loss of sight and loss of limbs. Where policy makers may be reluctant to invest in screening, they will be persuaded to do so if their populations/voters demand it. Social media initiatives and accessible technology can be used to promote risk tests and increase participation rates, putting the power to demand the right care and treatment into the hands of the person with, or at risk of, diabetes

Early detection

Case studies demonstrating how this can be achieved



Canada

What are they doing?

Patients can identify their risk of developing type 2 diabetes online through the CANRISK test. This enables them to proactively approach their healthcare professional for help³¹

What was the impact?

The test was validated by over 6,000 patients across seven provinces, and large numbers of the Canadian population have been reached as the programme has been extended for public, primary care and pharmacy use³², delivered in collaboration with healthcare, life science and life insurance companies³¹



USA

What are they doing?

The American Diabetes Association initiated the *Stop Diabetes* campaign in November 2009, which aims to end diabetes and all of its burdens. People from all over the US are pledging their support to the fight to Stop Diabetes as indicated in their Movement Map³³

What was the impact?

In less than one year, 677,728 people joined this movement to take a stand against diabetes³⁴. It now works to tackle the stigma associated with a diagnosis of type 2 diabetes by sharing patient experiences using blogs and social media³⁵



Denmark

What are they doing?

The *Anglo-Danish-Dutch Study of Intensive Treatment In People with Screen Detected Diabetes in Primary Care* (ADDITION study) assessed whether identifying people with diabetes earlier in the disease trajectory and treating them before symptoms develop could reduce the risk of them suffering an early death or experiencing a heart attack or stroke³⁶

What was the impact?

Study outcomes suggested that earlier diagnosis and treatment of diabetes can reduce the risk of a cardiovascular event by 7.5% in absolute risk reduction and 29% in relative risk reduction, as well as lower the risk of premature death³⁶



Brazil

What are they doing?

The *Strategic Action Plan to Prevent and Control Non-Communicable Diseases* sets specific targets for expanding Type 2 diabetes screening³⁷

What was the impact?

The Plan aims to extend screening in the primary care setting through community hospitals and pharmacies, reaching 60% of the population³⁷

Early control

Ensuring that people with diabetes are given the treatment and support they need to achieve good control of their blood glucose levels as early as possible, to reduce the risk of complications.

What is the imperative to act?

- By 2040, 642 million people will be living with diabetes, putting them at risk of heart attack, stroke, blindness and amputations¹
- Control of blood glucose, blood pressure and cholesterol according to leading guidelines has been found to significantly improve patient outcomes and reduce lifetime care costs³⁸

What could success in early control look like?

- By 2025, a 25% global reduction in premature mortality from diabetes, in line with the World Health Organization's vision from 2013⁹

What targets should be set to assess progress by 2020?

- 90% of people with type 2 diabetes being tested annually for HbA1c levels, blood pressure, lipids, diabetic foot disease and retinopathy
- A 10% rise in the number of people achieving their HbA1c goal each year³⁹
- A 10% rise in people achieving their blood pressure goal each year
- A 10% rise in people achieving their blood lipid goal each year
- **Local, service-level audits such as the following should be undertaken on an annual basis:**
 - o Number of hours devoted to education on diabetes control within medical colleges – both undergraduate and post-graduate levels
 - o Average length of time that people with suboptimal diabetes control wait before their next clinical appointment
 - o Percentage of local services prescribing in line with nationally-identified best practice guidelines

Where sophisticated systems are not in place to track this, annual spot-check audits should be conducted.



What policies should be implemented?

- **Self-management education available as part of routine care.** Programmes focusing on self-management for individuals, families and carers should promote lifestyle change as the primary focus of management of type 2 diabetes and encourage individuals to take responsibility for, and where necessary advocate for, their own improved control. Involvement of families and carers has been shown to improve outcomes⁴⁰
- **National guidelines on management of type 2 diabetes** should be developed and updated frequently, in line with emerging evidence; communication of these updates to healthcare professionals should be simple and easy to follow⁴¹
- **National monitoring to measure clinical outcomes** and to demonstrate the proportion of people with suboptimal control and the action being taken to address this
- **Financial incentives for healthcare professionals** in the setting where most type 2 diabetes patients are treated to achieve the targets set out in the national plan

What can be done to make policies more likely to succeed?

- Clinicians should be encouraged to escalate treatment in accordance with guidelines and to counter 'clinical inertia'. A personalised approach to early control should be advocated⁴²
- Awareness campaigns to improve public understanding of what good control looks like, and how to achieve it, should be implemented alongside policy, as seen in South Africa⁴³ and Bangladesh⁴⁴
- Best practice models that can be adopted and adapted for the local situation should be shared so that policy makers are aware of the benefits of effective, early control
- Cost-effectiveness analyses should be conducted on treatment options to establish those policies which provide for sound long term investment
- Perceptions must be shifted by patient groups to ensure that the public does see diabetes complications as serious contributors to premature mortality and morbidity, and that investment made in diabetes is aimed at addressing system failures, rather than people who are at 'fault' in any way³⁰

Early control

Case studies demonstrating how this can be achieved



Finland

What are they doing?

Patients were supplied with an electronic disease management system and a home care link, which allowed them and their providers to send and receive short message service (text messages) on either mobile phones or the internet⁴⁵

What was the impact?

Significant reductions in HbA1c levels were seen after 12 months (from 7.8% to 7.3%)⁴⁵



India

What are they doing?

‘Uday’ – an intensive five year programme – is training a variety of healthcare providers and community health workers in cost-effective methods to prevent and manage diabetes and hypertension⁴⁶

What will the impact be?

Expected results five years after implementation include a 50% increase in controlled blood glucose levels among patients⁴⁷



UK

What are they doing?

GP services were provided with financial incentives through the Quality and Outcomes Framework to improve HbA1c control⁴⁸

What was the impact?

Pay for performance may have contributed to the improvement in diabetes care seen since 2009, and the introduction of the Quality and Outcomes Framework has led to lessons being learned about removing thresholds and making targets more challenging to improve outcomes⁴⁹



Italy

What are they doing?

National action to raise awareness of diabetes was followed by a survey aimed to evaluate opinions of physicians about treatment, priorities, and barriers in the care of patients first referred to diabetes clinics. It indicated “achieving HbA1c target” as a key priority for physicians⁵⁰

What will the impact be?

These results can help drive new strategies to reduce clinical inertia, attitudes variability, and geographic disparities⁵⁰



Israel

What are they doing?

Electronic medical records enable doctors to evaluate the requirements of patients in real time. Alerts notify healthcare professionals to contact their patient when their blood glucose levels go out of control⁵¹

What was the impact?

Patients are spending no more than three months out of control before actions are taken. The number of people with diabetes with an HbA1c of more than 9% has decreased by more than two thirds and the average per person cost to the health system has also decreased by 30% over 12 years⁵¹

Early access to the right interventions

Ensuring that health systems are addressing the need for equitable, early access to the personalised education, lifestyle change programmes and treatments that people with type 2 diabetes need

What is the imperative to act?

- Access to lifestyle interventions such as individual counselling and motivational support on effective diet, exercise, and behaviour modification can reduce the risk of developing diabetes by as much as 58% across both genders and all ethnicities⁵²
- A proactive and personalised approach to improving blood glucose control in people with diabetes can lead to health service efficiencies, with the potential to reduce the average cost of a person with diabetes in the health system by 30%⁵¹
- Many countries may have national plans that outline the right personalised interventions patients should expect, but few are implemented effectively in a way that addresses access and capacity challenges

What could success in early access to the right interventions look like?

- By 2020, countries have a comprehensive national diabetes plan, covering best practice on early access to personalised education, lifestyle change programmes and treatment approaches
- By 2025, countries have a national diabetes registry established and regular monitoring of adherence to guidelines for education, lifestyle change programmes and modern approaches to treatment

What targets should be set to assess progress by 2020?

- **A 10% increase in the percentage of people with diabetes who have access to the following within one year of diagnosis⁵³:**
 - o Personalised education
 - o An individualised lifestyle programme
 - o A review of their treatment plan (in light of their HbA1c levels and clinical guidelines)

What policies should be implemented?

- **A national diabetes plan** that sets out national policy on diabetes management and includes agreed clinical targets. National plans must have clear policy recommendations and an implementation plan that includes timelines for delivery and monitoring, the key players responsible, budget implications, and short and long term targets
- **A nationally agreed drug list (formulary) for the management of type 2 diabetes** with measures in place to overcome obstacles to access and affordability, and to monitor progress towards universal health coverage⁵⁴. As a minimum this should include access to treatments for type 2 diabetes, blood pressure and lipids
- **A ten year plan** on equitable access to diabetes care for both public and private sectors, outlining how capacity will be provided to match the increasing demand of type 2 diabetes, addressing the policies, workforce and infrastructure required to ensure sustainable, equitable access



What can be done to make policies more likely to succeed?

- Establish bi-annual/annual audits of adherence to national guidelines as a way to monitor the implementation of the national plan with dedicated resources such as in Japan – this should be completed at a clinician, service and regional level
- Establish interoperable electronic health records to improve the ability to monitor blood glucose control and target personalised therapy – at home and at the GP clinic. Within a national healthcare system, this allows both continuous performance measurement and management, data linking and mobile device use, with advanced outcomes research and improvement cycles. On an international level, aggregated data could be shared and compared
- Ambition levels should be set high regarding what can be achieved within current budgets and systems, by thinking beyond existing practice and learning from international examples of best practice
- Resources should be invested upfront to identify where access to personalised interventions is poor, how to target improvements in this area and to establish a cohesive approach to addressing this¹⁰
- Responsibility must be held centrally for improving access to personalised interventions, with responsibility for implementation devolved locally, with co-ownership across services¹⁰
- Internationally, efforts should be made to learn about other countries' best practice in education, lifestyle change and treatment and what can be done to improve access in different systems and different financial contexts
- Governments should align with existing international initiatives calling for Universal Health Coverage, such as the World Health Organization and the World Bank's global monitoring of diabetes treatment coverage⁵⁵

Early access to the right interventions

Case studies demonstrating how this can be achieved



Israel

What are they doing?

A Regulatory Committee – tasked with improving the public health of the nation by implementing the national plan – has been created by the Ministry of Health⁵⁶

What was the impact?

This multi-disciplinary group includes representatives of the Ministry of Health and professional and patient organisations⁵⁷; it has been able to launch initiatives targeted at improving access to high quality diabetes care in different regions that encourage cooperation with other stakeholders including mayors and local councils⁵⁸



UAE

What are they doing?

The government has created comprehensive regulations, laws and initiatives to ensure that all people – especially children – can access positive education and lifestyle programmes including healthy food in schools, the development of expansive cycle and walking paths, obesity screening in school-age children and banning advertising for unhealthy foods⁵⁹

What will the impact be?

In 2013, the United Nations Children's Fund (Unicef) found that one in every three children in the UAE was obese⁶⁰. It is hoped that improving early access to effective lifestyle intervention and education support a reduction in these rates in the coming years



China

What are they doing?

In 2012, China implemented a National Plan for Non-Communicable Disease Prevention and Treatment⁶¹

What will the impact be?

The plan, developed by the Ministry of Health and fourteen other ministries, has set a number of measurable targets linked to improving access to effective care in type 2 diabetes, for example that 80% of primary care hospitals should be equipped to monitor blood glucose levels⁶¹



South Africa

What are they doing?

South Africa's National Strategic Plan for the Prevention and Control of Non-Communicable Diseases points to the need for increased investment in training for primary care providers⁶²

What will the impact be?

It is hoped the plan will increase screening targets at 5% growth overall and 30% growth in the proportion of screening conducted by primary care providers by 2017⁶²



Finland

What are they doing?

The Programme for the Prevention of Type 2 Diabetes in Finland inspired the first national strategy in the world to include the population-wide prevention of type 2 diabetes, launched in 2000⁶³

What was the impact?

Launched in 2000 with clear goals to be achieved by 2010, the DEHKO national strategy included 25 recommendations for early action such as the mobilisation of the health workforce into a combined diabetes / heart health model, access to new community nutritionist roles at the primary and occupational healthcare level, and the establishment of support groups for weight management⁶³

Diabetes stakeholders have
already pledged their support:

a. karasika

Okhant

fernanda@thome!

Nebogje lab

Reyes Fernando Teshe

Samir Jume

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Alexandre Kahl

Amel

Dr Liebermann Nicky

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Call to action

If every country takes steps to support the implementation of early action policies and ensure that the capacity is in place to achieve this, we have the potential to transform the current trajectory for type 2 diabetes, and the millions of lives currently affected by this life-changing, and life-threatening, condition. We are calling on all diabetes stakeholders across the globe to sign up to this Declaration and to support the drive towards implementing its recommendations.

You can sign up by emailing
astrazeneca@mhpc.com

Signed by:

John Richard Blickstead, Canada

Prof Antonio Ceriello, Italy

Professor Stephen Colagiuri, Australia

Dr Francesc Xavier Cos, Spain

Dr Mohamed Farghaly,
United Arab Emirates

Prof Dr Alexandre Hohl, Brazil

Dr Sanjay Kalra, India

Prof Abraham Karasik, Israel

Professor Kamlesh Khunti, United Kingdom

Professor Nebojsa Lalic, Serbia

Dr Nicky Lieberman, Israel

Professor Margaret McGill, Australia

Dr Antonio Gerardo Medea, Italy

Dr Augusto Pimazoni Netto, Brazil

Prof Itamar Raz, Israel

Dr Denise Reis Franco, Brazil

Professor Nabil Sulaiman,
United Arab Emirates

Dr Fernanda Thome, Brazil

Dr Sergio Zuniga-Guajardo, Mexico

Dr Jens Kröger, Chair,
diabetesDE – German Diabetes
Aid (GDA)

Dr Salim Yusuf, President,
World Heart Federation

Dr Shaukat Sadikot, President,
International Diabetes Federation

Professor Johan Wens, Chair,
Primary Care Diabetes Europe

In summary: the vision for early action in diabetes

	Prevention 	Early detection 
Policy recommendations	<ul style="list-style-type: none"> • A comprehensive national diabetes prevention strategy, focussing on children and adults separately. A baseline programme should be implemented as a minimum in all countries with ambitions set to progress this proportionate to the resources available • A diabetes prevention programme to provide lifestyle advice to those with impaired glucose tolerance or 'prediabetes' • A tax on sugar-sweetened beverages. This might also include tax increases and restrictions on advertising of foods high in sugar, refined carbohydrates and saturated fat; as well as subsidies for fresh fruit and vegetables • Local government tasked with driving prevention by modifying urban environments and local food environments 	<ul style="list-style-type: none"> • A national screening programme for type 2 diabetes. The specifics of this may vary depending on national prevalence and risk factors, but as a minimum would include systematic and proactive assessment of at risk individuals, alignment with services that provide care for diabetes-related complications, capacity planning for increase in referrals and collection of data on numbers screened and diagnosed • A validated screening risk assessment tool (or small number of tools) agreed in each country to identify people at risk of developing type 2 diabetes and consistently monitor the data
What could success look like?	<ul style="list-style-type: none"> • By 2025, to halt the rise in diabetes and obesity⁹ • By 2030, a global reduction in premature mortality from diabetes of one third, through prevention and treatment⁸ 	<ul style="list-style-type: none"> • By 2025, a 25% reduction in the frequency of diabetes-related complications detected at diagnosis • By 2025, a 25% reduction in the number of patients with an HbA1c level of 7% or above at diagnosis

Early control



- **Self-management education available as part of routine care.** Programmes focusing on self-management for individuals, families and carers should promote lifestyle change as the primary focus of management of type 2 diabetes and encourage individuals to take responsibility, and where necessary advocate, for their own improved control
- **National guidelines on management of type 2 diabetes** should be developed and updated frequently, in line with emerging evidence
- **National monitoring to measure clinical outcomes** and to demonstrate the proportion of people with suboptimal control and the action being taken to address this
- **Financial incentives for healthcare professionals** in the setting where most type 2 diabetes patients are treated to achieve the targets set out in the national plan

- By 2025, a 25% global reduction in premature mortality from diabetes

Early access to the right interventions



- **A national diabetes plan** that sets out national policy on diabetes management and includes agreed clinical targets. National plans must have clear policy recommendations and an implementation plan that includes timelines for delivery and monitoring, the key players responsible, budget implications, and short and long term targets
- **A nationally agreed drug list (formulary) for the management of type 2 diabetes** with measures in place to overcome obstacles to access and affordability, and to monitor progress towards universal health coverage
- **A ten year plan** on equitable access to diabetes care for both public and private sectors, outlining how capacity will be provided to match the increasing demand of type 2 diabetes, addressing the policies, workforce and infrastructure required to ensure sustainable, equitable access

- By 2020, countries have a comprehensive national diabetes plan, covering best practice on early access to personalised education, lifestyle change programmes and treatment approaches
- By 2025, countries have a national diabetes registry established and regular monitoring of adherence to guidelines for education, lifestyle change programmes and modern approaches to treatment

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