



National Priorities
for Turning Around the Diabetes Epidemic

2007-2008



Turning diabetes around

awareness | prevention | detection | management | cure



Diabetes Australia is the national peak body for diabetes in Australia providing a single, powerful, collective voice for people living with diabetes, their families and carers. Diabetes Australia works in partnership with diabetes health professionals and educators, researchers and health care providers to minimise the impact of diabetes on the Australian community.

Diabetes Australia is a Federation of 12 consumer, health professional and research organisations. Through these member organisations and the administration of the National Diabetes Services Scheme, Diabetes Australia provides practical assistance, information and subsidised products to over 800,000 Australians with diabetes.

Diabetes Australia represents the interests of people with diabetes and those at risk of developing diabetes by raising awareness about the seriousness of diabetes, promoting prevention and early detection strategies and lobbying for better standards of care.

Diabetes Australia is also a significant financial contributor to research into better treatments for diabetes and the search for a cure. Diabetes Australia raises over \$3.5 million for research every year.

Diabetes Australia – Turning Diabetes Around through awareness, prevention, detection, management and a cure.

Diabetes Australia
GPO Box 3156
CANBERRA ACT 2601

5th Floor, 39 London Circuit
CANBERRA CITY ACT 2600
AUSTRALIA

Telephone: +61 2 62323800
Facsimile: +61 2 62301535
Email: admin@diabetesaustralia.com.au
Web: diabetesaustralia.com.au

President: Dr Gary Deed
Chief Executive Officer: Mr Brian Conway



Contents

President's Foreward	02
Executive Summary	03
Key Recommendations	04
Introduction	05
What is diabetes?	06
Summary of Recommendations	08
Priority Area One: AWARENESS	11
Cost of Diabetes	11
COAG and the National Reform Agenda	12
Priority Area Two: PREVENTION	13
Type 2 Diabetes and Obesity	14
Childhood Obesity	14
Type 2 Diabetes and Lifestyle	15
Healthy Active Transport and healthy built-environments	17
Priority Area Three: DETECTION	19
A Diabetes Risk Assessment Tool	19
Gestational Diabetes – Screening and Recall	21
Priority Area Four: MANAGEMENT	23
Medicare Benefits Schedule	24
Health Care Cards	24
Access to Insulin Pumps	25
Primary Care Collaboratives	25
Health Workforce	26
Credentialed Diabetes Educators	26
Indigenous Health Workers	27
Priority Area Five: CURE	29
Medical Research	29
Research into Diabetes in Pregnancy	30
AusDiab Phase 3	30

President's Foreward



It is imperative that we take immediate action because 275 Australians develop diabetes every day; making it Australia's fastest growing chronic disease. There are approximately 1.5 million Australians with diabetes and unfortunately, half of these people are unaware of their condition. Diabetes is the sixth leading cause of death in Australia,

Diabetes Australia is committed to turning diabetes around through awareness, prevention, detection, improved management and a cure. This is exemplified through our new "turn-around" branding and the National priorities document presented here.

I am passionate as the National President of Diabetes Australia about achieving better health outcomes for all Australians living with diabetes because I am one of many who have diabetes and share the commitment of many like-minded colleagues representing all people with diabetes. Curbing this epidemic will not be a simple and straight-forward process as it will require this commitment and determination from many sources. Diabetes Australia cannot do this alone.

Diabetes Australia developed these National Priorities and Recommendations to draw attention to those issues that in the long-term will lead to improved health outcomes for all Australians with diabetes. This document also provides a concise framework for the direction of future policies around diabetes.

The policy priorities in this document were developed to globally address the full spectrum of diabetes from awareness and prevention, through early detection, to management and, ultimately, a cure.

Historically, our focus has been in improving the management of diabetes and focusing research efforts into finding a cure. But the incidence of diabetes is increasing at an alarming rate; it is clear that we now need to do more.

Diabetes Australia is increasing focus on the other key areas of the spectrum – the areas of **awareness, prevention and detection**. By taking this step Diabetes Australia with collaboration will do more than just help individuals manage diabetes and the complications of diabetes. We will be part of a solution that provides the foundation for reducing the growth of the disease –the issue at the heart of the social and economic impact of diabetes. Again, help is needed to achieve this aim.

I strongly urge you to consider the contents of Diabetes Australia's National Priorities and help us to help those living with diabetes.

Dr Gary Deed
National President

Executive Summary

An estimated 275 Australians develop diabetes every day. The Australian AusDiab study shows that 1.5 million Australians have diabetes but that up to half of the cases of type 2 diabetes remain undiagnosed. In addition a high proportion of Australians aged 25 years and over have significant risk factors for developing type 2 diabetes.

At the same time the prevalence of type 1 diabetes is also increasing.

The cost to this country and to the individuals affected is disastrous. At a national level, government health budgets are significantly impacted to the extent of an estimated \$6 billion per annum, while at an individual and personal level, people with diabetes are hit with greatly increased personal health costs. This is accompanied by a significant social cost, as a result of a person's decreased capacity. The cost of diabetes increases significantly with complications – peripheral nerve damage, amputation, heart disease, blindness and kidney failure.

Type 2 diabetes has been a looming health crisis for sometime. It has been a national health priority since 1996 yet since 1996 the prevalence of type 2 diabetes has doubled. We are losing the battle even though we know that up to 80% of type 2 diabetes and its complications are preventable or can be delayed by healthy diet and increased physical activity.

Ten years after type 2 diabetes was made a health priority, the diabetes epidemic remains the greatest single threat to the national healthcare Budget. In 2006 the Council of Australian Governments (COAG) agreed to make type 2 diabetes a National Reform Agenda priority. It is critical that type 2 diabetes remains a national reform priority if Australia is to make any inroad into the increasing prevalence of type 2 diabetes and thereby minimise the personal, social and economic costs of the diabetes epidemic.

Ultimately any interventions that successfully prevent or delay the onset of type 2 diabetes will be cost effective. A reduction in the prevalence of type 2 diabetes will not only result in cost savings in the health budget, but increased participation and productivity in the workforce and, most importantly, better health outcomes and quality of life for Australians.

DIABETES AUSTRALIA

Diabetes Australia represents people living with all types of diabetes – type 1, type 2 and Gestational Diabetes (GDM).

Recently Diabetes Australia adopted a new corporate look – a turn around arrow – which symbolises both the journey described by many people diagnosed with diabetes and Diabetes Australia's renewed commitment to turn the diabetes epidemic around.

In this document, Diabetes Australia outlines a number of key national priorities and strategies to begin to turn the diabetes epidemic around. These priorities span the full spectrum of the disease –

AWARENESS, PREVENTION, DETECTION, MANAGEMENT, A CURE

AWARENESS

Raising awareness of the prevalence and seriousness of all types of diabetes, the risk factors for developing type 2 diabetes and the personal, social and economic implications of the diabetes epidemic

PREVENTION

Prevention of type 2 diabetes by developing healthier individuals and communities, especially children; promoting physical activity, healthy eating and built environments that encourage activity

DETECTION

Early detection of people at high risk of diabetes and those who have undiagnosed diabetes to facilitate targeted early intervention strategies.

MANAGEMENT

Best practice management which requires increasing affordability and access to health-care teams, professionals and services for all people with all types of diabetes as an integral component of self-management

CURE

Increased funding for and greater priority given to diabetes research for all types of diabetes (type 1, type 2 and gestational) and across the spectrum of the disease – awareness, prevention, detection, management with the ultimate aim of one day finding a cure.

The escalating health and financial costs of the type 2 diabetes epidemic provide an imperative for policy makers at all levels to focus resources on raising awareness, on prevention and the detection of those at risk of developing type 2 diabetes and those with undiagnosed type 2 diabetes. For those with all types of diagnosed diabetes – type 1, type 2 and gestational diabetes – the priority is improving access to appropriate standards of management and care to prevent or delay the onset of complications. Research across all aspects of diabetes is also essential, with the ultimate goal of finding a cure for diabetes.

It is essential that immediate and effective action is taken now by the Australian Government,

partnering with Diabetes Australia, healthcare specialists and professional organisations, the pharmaceutical industry, corporations and community groups to Turn Diabetes Around

As an immediate first step in this process, Diabetes Australia proposes a partnership with the Australian Government to design and implement a National type 2 Diabetes Risk Assessment Tool, to be administered through community settings – pharmacies and general Practice. Persons assessed to be at high risk of either developing type 2 diabetes or having undiagnosed diabetes would

be immediately referred to the GP for medical assessment and appropriate intervention and management.

This programme will deliver three critical objectives – it will raise awareness, identify those at risk so that they can be directed to lifestyle changes to prevent type 2 diabetes and it will diagnose the undiagnosed.

Diabetes Australia's Top Five Priorities

AWARENESS

Diabetes to remain a high level initiative within the Council of Australian Government's National Reform Agenda.

PREVENTION

Recognition of obesity, including childhood obesity, as a treatable chronic disease, consistent with the World Health Organisation definition (WHO). This will enable affordable access to nutrition, physical activity and weight management expertise for people at high risk of developing diabetes.

DETECTION

Refine, implement and promote a nationally agreed Diabetes Risk Assessment Tool for type 2 diabetes.

MANAGEMENT

Increase affordability of and access to allied health care professionals and services for all people with diabetes by introducing initiatives to expand the national allied health workforce including training and recognition of indigenous health workers.

CURE

Increase funding for research into all aspects of all types of diabetes by matching dollar for dollar the research funds raised by the Diabetes Australia Research Trust (\$3m in 2006).

Introduction

Diabetes is the world's fastest growing disease. It currently affects 246 million people worldwide and this number is expected to rise to 380 million by 2025.

In Australia the prevalence of **diagnosed** diabetes in people aged 25 years and over was 3.7% in 2000 (AusDiab, 2001). Including those with **undiagnosed** diabetes, the prevalence doubles to 7.4%.

Translated into numbers, approximately 1.5 million Australians are estimated to have diabetes, but only half are aware they have this chronic condition. By 2031 it is estimated that 3.3 million Australians will have type 2 diabetes (Vos et al., 2004). Around 275 adults in Australia develop diabetes every day (AusDiab, 2001).

What is diabetes

Diabetes is an illness which occurs as a result of problems with the production and supply of insulin in the body.

Most of the food we eat is turned into glucose, a form of sugar. We use glucose as a source of energy to provide power for our muscles and other tissues. Our bodies transport glucose in our blood. In order for our muscles and other tissues to absorb glucose from our blood, we need a hormone called insulin. Without insulin, our bodies cannot obtain the necessary energy from our food.

Insulin is made in a large gland behind the stomach called the pancreas. It is released by cells called beta cells. When a person has diabetes, either their pancreas does not produce the insulin they need, or their body cannot use its own insulin effectively. As a result, people with diabetes cannot use enough of the glucose in the food they eat. This leads to the amount of glucose in the blood increasing. This high level of glucose or "high blood sugar" is called hyperglycaemia. High levels of glucose in the blood can lead to serious complications. **At present there is no cure for diabetes.**

THERE ARE TWO MAIN TYPES OF DIABETES:

Type 1 diabetes is sometimes called insulin-dependent, immune-mediated or juvenile-onset diabetes. It is caused by an auto-immune reaction where the body's defence system attacks the insulin-producing cells. The reason why this occurs is not fully understood. People with type 1 diabetes produce very little or no insulin. The disease can affect people of any age, but usually occurs in children or young adults. The average number of children 0-14 years diagnosed with type 1 in Australia is 20 per 100,000 (National Diabetes Register). People with this form of diabetes need injections of insulin every day in order to control the levels of glucose in their blood. If people with type 1 diabetes do not have access to insulin, they die.

Type 2 diabetes is sometimes called non-insulin dependent diabetes or adult-onset diabetes. Type 2 diabetes is the most common type of diabetes and accounts for 85-90% of all diabetes. People with type 2 diabetes do not usually require injections of insulin initially, however about 50% of people will need insulin within 5-10 years of diagnosis to maintain good control. Usually they can control the glucose in their blood by watching their diet, taking regular exercise, oral medication and, possibly, insulin. If people with type 2 diabetes are not diagnosed and treated, they can develop serious complications, which can result in an early death.

The onset of type 2 diabetes is linked to genetic factors but obesity, physical inactivity and unhealthy diet increase the risks.

Type 2 diabetes is most common in people older than 45 years of age who are overweight. However, as a consequence of increased obesity among the young, it is becoming more common in young adults, adolescents and even children, particularly Aboriginal and Torres Strait Islander children. There are now over 550 children with type 2 diabetes in Australia registered on the National Diabetes Services Scheme (NDSS).

Gestational diabetes. Some women develop a third, usually temporary, type of diabetes called "**gestational diabetes**" when they are pregnant. Gestational diabetes develops in 3-5% of all pregnancies but usually disappears when the pregnancy is over. Women who have had gestational diabetes have a 30-50% increased risk of developing type 2 diabetes later in life.

Other, rarer types of diabetes, also exist.

Diabetes is serious

UNITED NATIONS RESOLUTION ON DIABETES

At the global level, the seriousness of diabetes as a chronic, debilitating and costly disease has been recognised by the United Nations (UN). On 20 December 2006 the UN General Assembly passed UN Resolution 61/225 recognising diabetes as a major health crisis facing all nations of the world. The Resolution designates 14 November each year as a United Nations World Diabetes Day and calls on all nations to develop national policies for the prevention, treatment and care of the 246 million people living with diabetes and the many millions more at risk of developing diabetes.

IN AUSTRALIA

In Australia, the seriousness of diabetes is demonstrated by the fact that 275 people a day, or over 100,000 per year, develop diabetes (AusDiab, 2006). People with diabetes are 2-4 times more likely to develop cardiovascular disease than people who do not have diabetes and over twice as likely to have a heart attack or stroke. In fact, cardiovascular disease is the major cause of death for people with diabetes, accounting for some 50% of all diabetes fatalities. Diabetic retinopathy is the leading cause of vision loss in adults of working age (20 to 65 years). Diabetes foot complications are the most common cause of lower limb amputations not related to trauma and people with diabetes are 3 times more likely to have destructive periodontal disease. Diabetes is the largest cause of kidney failure in developed countries and is responsible for increasing costs of dialysis. Type 2 diabetes has become the most frequent condition in people with kidney failure in countries of the Western world with 10% to 20% of people with diabetes dying of renal failure. People with diabetes report significant effects on health-related quality of life, particularly related to mobility and pain/discomfort and significantly higher levels of anxiety and depression.

On average, people with type 2 diabetes will die 5-10 years before people without diabetes, mostly because of cardiovascular disease (IDF).

DIABETES AND INDIGENOUS AUSTRALIANS

Diabetes is even more serious for indigenous communities. Rates of diabetes for indigenous Australians are estimated to be at least 4 times higher than for other Australians. Indigenous people in remote areas are twice as likely as other Indigenous Australians to report having diabetes and in some Indigenous communities the prevalence of diabetes could be as high as 30%. Indigenous people are diagnosed at younger ages with type 2 diabetes and have an excess of avoidable complications and die earlier, compared with other Australians. Indigenous Australians over 35 years of age have a death rate from diabetes more than 20 times that of the Non-Indigenous population (AIHW Australia's Health, 2004).

Type 2 diabetes has been a national health priority since 1996, yet since 1996 the prevalence of type 2 diabetes has doubled. We are losing the battle even though we know that up to 80% of type 2 diabetes and its complications are preventable by adopting a healthy diet and increasing physical activity.

The policy priorities outlined in this document recommend strategies that focus on raising awareness, prevention, detection and management to prevent or delay the onset of diabetes complications together with research across all aspects of diabetes.

AWARENESS | PREVENTION | DETECTION | MANAGEMENT | CURE

Priority Area	Policy Objective	Recommendation / Action
AWARENESS		
Awareness of the prevalence and seriousness of all types of diabetes, the risk factors for developing type 2 diabetes and the personal, social and economic implications of the diabetes epidemic.	<ul style="list-style-type: none"> - Diabetes to remain a high level initiative within the Council of Australian Governments National Reform Agenda. 	<ul style="list-style-type: none"> - Council of Australian Governments (COAG) to develop and implement the National Reform Agenda (NRA) on Diabetes. - Federal and State Governments to commit resources to the implementation of population-based awareness and prevention and detection strategies under the NRA on Diabetes.
PREVENTION		
Prevention of type 2 diabetes by developing healthier individuals and communities; promoting physical activity, healthy eating and built environments that encourage activity.	<ul style="list-style-type: none"> - Recognition of obesity, including childhood obesity, as a treatable chronic disease – consistent with the WHO definition. 	<ul style="list-style-type: none"> - Recognise obesity, including childhood obesity, as a treatable chronic disease – consistent with the WHO definition.
	<ul style="list-style-type: none"> - Reduction in childhood obesity by promoting physical activity and healthy eating. - Implement Body Mass Index (BMI) benchmark testing of children to track trends in childhood obesity. 	<ul style="list-style-type: none"> - Develop and implement health education, nutrition and physical education programs for children and young people. - Introduce school wellness policy programs specifically targeted at securing student and teacher commitment to a nutrition and exercise program at school. - Develop and implement a national advertising standards for the promotion and marketing of energy-dense / nutrition-poor foods to children with appropriate regulatory controls, penalties and monitoring.
	<ul style="list-style-type: none"> - Increased access to prevention and early intervention programs to increase physical activity and healthy eating habits. 	<ul style="list-style-type: none"> - Enhance provision of and access to nutrition, physical activity and weight management expertise for key high risk target groups. - Increase health insurance coverage (Medicare and Private) of lifestyle modification programs.
	<ul style="list-style-type: none"> - Employment initiatives for employers to develop and implement healthy, active workplace programs. 	<ul style="list-style-type: none"> - Provide incentives for employers to implement health active workplaces including opportunities for employees to undertake lifestyle modification programs, daily physical activities and better eating practices.
	<ul style="list-style-type: none"> - Further research into and implementation of evidence-based population interventions to create a healthy and active Australia. 	<ul style="list-style-type: none"> - Increase research into evidence-based population interventions that have the potential to create a healthy and active Australia.
	<ul style="list-style-type: none"> - Nation wide shifts to active transportation and healthy built-environment policies. 	<ul style="list-style-type: none"> - Improve community planning and development to provide safe and accessible facilities to encourage physical activity. - Establish national transportation and built-environment policies focussed on healthy active community participation .
DETECTION		
Early detection of people at high risk of diabetes and those who have undiagnosed diabetes to facilitate targeted early intervention strategies.	<ul style="list-style-type: none"> - Detection of all high risk groups with specific focus on those with undiagnosed diabetes in Aboriginal and Torres Strait Islander communities, especially their children, with obesity and diabetes. - Targeted intervention strategies for high risk groups. 	<p>A NATIONALLY AGREED RISK ASSESSMENT TOOL FOR TYPE 2 DIABETES</p> <p>Refine, promote and implement a nationally agreed Risk Assessment Tool for type 2 diabetes accompanied by:</p> <ul style="list-style-type: none"> - A national social marketing campaign focused on the National Risk Assessment Tool to raise awareness of diabetes, identify those at high risk and those who are undiagnosed. - A national Diabetes Risk Hotline and Website. - General Practitioner incentive payments for reaching specified targets for diabetes risk assessment. <p>NATIONAL GUIDELINES FOR GESTATIONAL DIABETES SCREENING</p> <ul style="list-style-type: none"> - Implement national guidelines for gestational diabetes screening. - Establish a national recall system for type 2 diabetes screening following gestational diabetes.

MANAGEMENT

Best practice management of diabetes.

- Increase affordability and access to health-care professionals and services for all people with diabetes (as an integral component of self-management).

INCREASE AFFORDABILITY AND ACCESS TO HEALTH CARE PROFESSIONALS AND SERVICES

Medical benefits schedule

- Expand rebatable items under the Medicare Benefits Schedule for early intervention programs to assist in improved self-management.
- Increase the number of visits covered under the Medicare Benefits Schedule for allied health care services.
- Increase the length of consulting sessions available under the MBS for allied health care services particularly those related to sessions with Credentialed Diabetes Educators.

Health insurance

- Expand health insurer coverage (Medicare and Private) of early intervention programs for those newly diagnosed with diabetes and pre-diabetes.

Health care card

- Expand Health Care Card access for 16-18 year olds with a chronic disease (type 1 diabetes, type 2 diabetes, etc).

Access to Insulin Pumps

- Provide Insulin Pumps to people with type 1 diabetes under the age of 18 and pregnant women with type 1 diabetes.

- Expansion of the National Primary Care Collaboratives.

NATIONAL PRIMARY CARE COLLABORATIVES

- Expand the National Primary Care Collaboratives across all Divisions of General Practice.
- Enhance the current participation of General Practitioners in diabetes information management systems.

- A nation-wide program of training and recognition for Aboriginal and Torres Strait Islander Health Workers.

INDIGENOUS HEALTH CARE WORKERS

- Develop and implement a national uniform training program to increase the skills of Aboriginal and Torres Strait Islander Health Workers.
- Improve workplace recognition for Aboriginal and Torres Strait Islander Health Workers.

- Expansion of the National Health Workforce.

HEALTH WORKFORCE

- Develop and implement incentive programs to recruit and retain individuals to allied health and primary care professions.
- Enhance opportunities for individuals entering into diabetes healthcare training.
- Provide funding and support for the delivery of accredited diabetes specific training programs particularly through Indigenous Training Colleges and TAFEs.

CURE

Research leading to a cure for diabetes.

- Increased funding for research into all aspects of all types of diabetes.

RESEARCH

- Increase financial support of diabetes research in Australia.
- Dollar for dollar matching by the Australian Government of research funds raised by the Diabetes Australia Research Trust.
- Increase incentives for medical researchers to study and practice within Australia.
- Fund research into gestational diabetes.
- Fund 10 year follow-up AusDiab study.



Priority Area One Awareness

POLICY OBJECTIVE:

Diabetes Australia is committed to ensuring that type 2 diabetes remains a high level initiative within the Council of Australian Government's National Reform Agenda

Recommended Action

- Council of Australian Governments (COAG) to develop and implement the National Reform Agenda (NRA) on type 2 diabetes.
- Federal and State Governments commit resources to the implementation of population-based awareness and prevention strategies on type 2 diabetes under the NRA.

Cost of Diabetes

In 2003 the **average** annual per person cost of type 2 diabetes was \$5,360 in Australia. For a person with no complications the per person cost was \$4,025 increasing to \$9,645 for people with both microvascular (eye problems, kidney damage, foot or leg ulcers) and macrovascular (heart attack, stroke, amputation) complications. (DiabCo\$t Australia, 2003)

With an overall Australian diabetes prevalence of 7.4% (AusDiab, 2000) the total annual cost for people aged over 40 years, with type 2 diabetes is estimated to be \$2.2 billion. If the cost of carers is included this rises to \$3.1 billion. People with type 2 diabetes also receive an average of \$5,540 per year in Commonwealth benefits, increasing the total annual cost of diabetes to \$6 billion (DiabCo\$t Australia, 2003).

These costs do not include lost productivity from days lost through illness and premature death.

In October 2006 Access Economics reported that people with type 2 diabetes have significantly lower workforce participation and productivity rates than the general population. Of people with diabetes aged 15-64 years (i.e. working age), 52.1% reported being employed compared with 73.7% of people in the total population. The annual cost of lost earnings due to workplace separation and early retirement from type 2 diabetes was estimated at \$3.96 billion in 2005 (0.44% of GDP) (Access Economics, 2006).

In addition to workforce separation, people with type 2 diabetes may be absent from work more often as a result of their condition. Access

Economics estimated the annual absenteeism cost because of type 2 diabetes to be \$53.1 million in 2005 (Access Economics, 2006).

The productivity loss from premature death from type 2 diabetes was estimated as \$64.7 million in 2005 (Access Economics, 2006).

In 2005 the total Australian productivity costs of diabetes was \$4.079 billion. This was the sum of the losses from lower employment rates, absenteeism and premature death. Of that total, Access Economics estimated that \$2.5 billion (62.6%) was borne by the people with diabetes, \$28.5 million was borne by employers and \$1.5 billion (36.7%) was borne by the government in the form of lost taxation revenues (Access Economics, 2006).

Research also demonstrates that complications are the major driver of all costs in diabetes care. For those who have been diagnosed with diabetes, strategies that minimise the development or progression of complications will also significantly reduce the burden of diabetes on the health system and the economy.

These figures indicate that the health and financial burden of chronic diseases such as diabetes has the potential to create unsustainable pressures on health systems and on the national economy. Investment in awareness-raising and interventions that successfully prevent or delay the onset of type 2 diabetes and its complications will be cost-effective in the long-run. A reduction in the prevalence of type 2 diabetes will result in cost savings in the health budget, increased participation and productivity in the workforce and, most importantly, better health and quality of life for Australians.

COAG's National Reform Agenda

The 1980's and 1990's saw the Council of Australian Governments (COAG) progress through two waves of national reform. A new National Reform Agenda (NRA) was proposed in August 2005 for consideration by the Council of Australian Governments. This national reform agenda included a new emphasis on building the nation's human capital.

In 2006 the COAG committed to this National Reform Agenda, the cornerstone of which is the relationship between the health of the community, workforce participation and the nation's future productivity and living standards.

The focus of the NRA is to reduce the proportion of the working-age population which is not participating or under-participating in the paid workforce. The health focus of the NRA is to reduce the incidence of preventable chronic disease, including type 2 diabetes and end-stage renal disease, in the working-age population.

The size, urgency and complexity of the type 2 diabetes epidemic in Australia was recognised when type 2 diabetes was identified under the National Reform Agenda as a foundation area with the potential to provide critical local, state and national platforms upon which broader chronic disease strategies can be built.

Type 2 diabetes was chosen because of the magnitude of the type 2 diabetes epidemic - estimated at 3.3 million Australians by 2031 (Vos et al., 2004); the fact that the key modifiable risk factors contributing to the increasing prevalence of type 2 diabetes – obesity, poor diet and lack of physical activity – also underpin a number of other chronic diseases including heart disease, stroke, bowel cancer, depression and kidney disease; the well-documented link between type 2 diabetes and numerous co-morbidities including heart attack and stroke; and the realisation that national action on type 2 diabetes has the potential to make a significant contribution to reducing the burden of chronic disease more broadly.

The public health and productivity consequences and costs of type 2 diabetes and obesity warrant investment of planning, budgets and resources at all levels of government.

Diabetes Australia submits that the escalating health and financial costs of the type 2 diabetes epidemic provide an imperative for policy makers at all levels to focus resources on raising awareness and on prevention, on the detection of those at risk of developing type 2 diabetes and those with undiagnosed type 2 diabetes and improving access to appropriate standards of management and care to prevent or delay the onset of complications for all types of diabetes.

Diabetes Australia believes that the National Reform Agenda under the COAG provides the ideal vehicle for Federal and State Governments to agree on priorities, strategies and outcomes and then to cooperate to deliver those outcomes across all levels of government. The COAG framework allows policy responses tailored to national and local needs and recognises the federal / state responsibilities for service provision that exist under Australia's federal system. It encourages diversity, innovation, flexibility and responsiveness and facilitates cost-sharing of major initiatives.

Diabetes Australia strongly recommends that type 2 diabetes remains a high level initiative within the Council of Australian Government's National Reform Agenda and that Federal and State Governments commit resources to the implementation of population-based awareness and prevention strategies for type 2 diabetes.



Priority Area Two Prevention (type 2 diabetes)

POLICY OBJECTIVE:

The implementation of strategies that have the potential to prevent diabetes by reducing overweight and obesity, particularly childhood obesity, and by encouraging healthy eating and active lifestyles.

RECOMMENDED ACTIONS

- Recognise obesity, including childhood obesity, as a treatable chronic disease – consistent with the WHO definition.
- Develop and implement health education, nutritional and physical education programs for children and young people.
- Introduce school wellness policy programs specifically targeted at securing student and teacher commitment to a nutrition and exercise program at school.
- Develop and implement a national advertising standard for the promotion and marketing of energy-dense / nutrition-poor foods to children with appropriate regulatory controls, penalties and monitoring.
- Enhance provision of and access to nutrition and physical activity expertise for key high-risk target groups.
- Increase access to prevention and early-intervention programs aimed at increasing physical activity and healthy eating habits.
- Increase health insurance coverage (Medicare and private) of lifestyle modification programs.
- Provide incentives for employers to provide opportunities for employees to undertake lifestyle modification programs, including daily physical activities and better eating practices.
- Increase research into evidence-based population interventions to create a healthy and active Australia.
- Improve community planning and development to provide safe and accessible facilities to encourage physical activity.
- Establish national active transportation and built-environment policies focussed on healthy active communities.

Introduction

To date, scientific knowledge has not identified a way to prevent **type 1 diabetes**. While up to 80% of cases in type 2 diabetes can be delayed and even prevented.

The benefits of preventing **type 2 diabetes** or reducing its prevalence, however, are compelling in terms of personal, social and economic cost savings including reduced health costs and improved workforce participation and productivity – all of which underpin Australia's future prosperity.

While type 2 diabetes has strong age and genetic associations, there are a number of other major risk factors which increase the possibility of

developing type 2 diabetes. These include diet, obesity and lack of exercise.

Primary prevention of the modifiable risk factors for diabetes – overweight, obesity, physical inactivity and unhealthy eating – will have benefits for the prevention of other chronic diseases, particularly cardiovascular disease and a number of cancers.

Diabetes Australia supports evidenced-based community-wide interventions and recommends funding for further research into successful community intervention programs and their wider application. Diabetes Australia also supports funding and planning at a state and local level for active transport and built-environments that encourage activity in daily routines.

Type 2 diabetes and obesity

In 2005, Diabetes Australia commissioned Access Economics to research and report on the economic costs of obesity. The report concluded that **3.24 million Australians were estimated to be obese including 280,000 young Australians (aged 5-19 years)**. Obesity rates appear to be increasing for both adults and children with research indicating that there has been a 2-4 fold increase in obesity prevalence rates between 1985 and 1997 in Australia (Access Economics, 2006). If rates continue to increase **there could be as many as 7.2 million obese Australians by 2025** (28.9% of the population) (Access Economics, 2006).

People who are obese have increased overall risk of death but also are 3.2 times more likely to develop type 2 diabetes and are more likely to develop cardiovascular disease (CVD) (including stroke, hypertension, heart disease) osteoarthritis, various cancers (colorectal, breast, uterine and kidney) and other health conditions.

In 2005 it was estimated that 102,000 Australians had type 2 diabetes as a **direct result** of being obese (10.8% of all people with diabetes). In addition, 379,000 had CVD and 20,430 had cancer as a result of being obese (Access Economics, 2006).

Access Economics estimated the cost of obesity to Australia - which includes direct financial costs to the Australian health system (hospitals, GP and specialist services etc), other financial costs (productivity losses, carer costs, taxation revenue foregone and welfare payments etc) and other non-financial costs such as loss of well-being and premature death - to be \$21 billion dollars per annum (Access Economics, 2006).

The cost for obesity-related type 2 diabetes was estimated at \$2.4 billion per annum.

The Australian Government in conjunction with State and Territory Governments recognised the imperative of promoting good nutrition and healthy eating to reduce obesity when they supported the *Australian Better Health Initiative*. Despite these and other initiatives the overweight and obesity problem has continued to escalate and the consequent health, social and economic burden on our nation has grown.

If we are to turn around the increasing burden of obesity and the impact of obesity on the type 2 diabetes epidemic, governments at all levels, Federal, State and local need to work together to create an environment of positive, sustainable, systemic community change with respect to health, lifestyle and diabetes.

Childhood obesity

There are an estimated 280,000 young Australians (aged 5-19 years) who are obese. One in five Australian children is overweight and one in ten is obese.

Although the link between Body Mass Index (BMI) and ill-health is less clear in children and adolescents because many of the consequences of obesity take time to develop, one of the exceptions to this is type 2 diabetes which is becoming increasingly common in children. In the past, people under 45 years of age rarely developed type 2 diabetes, however the incidence is rising in young adults, adolescents and even children, particularly Aboriginal and Torres Strait Islander children, in parallel with higher rates of obesity in young adults (Access Economics, 2006). There are now over 550 children with type 2 diabetes registered on the National Diabetes Services Scheme (NDSS) database.

Childhood obesity also increases the likelihood of obesity later in life which is a risk factor for developing type 2 diabetes (Access Economics, 2006).

BMI Benchmark testing

Diabetes Australia supports Body Mass Index (BMI) benchmark testing of children so that the level of overweight and obesity in children can be measured and trends tracked. When policy makers understand the extent of the problem, they will be in a better position to plan and implement strategies to manage it.

Health, nutrition and physical education of children and young people

Diabetes Australia recognises that obesity, and childhood obesity in particular, are complex, multi-faceted problems that require a range of solutions, all carrying a consistent message about healthy eating and physical activity.

In the school environment there are opportunities to raise awareness, understanding and access to quality information regarding health, nutrition and physical activity. Enhanced training of teachers to implement curricula dealing with health, nutrition and physical activity is also important.

Overseas there are examples of successful programs which address childhood obesity in schools. For example, the American National Alliance for Nutrition and Activity (NANA) has developed a Model Local School Wellness Policy on Physical Activity and Nutrition.

Within Australia there have also been a number of successful trials of programs aimed at

reducing childhood obesity. Victoria's "Be Active Eat Well" program, for example, achieved some reduction in the obesity of the 1800 children aged from two to 12 years who took part in the four-year trial. Children stayed lighter and slimmer, watched 20 per cent less television, drank almost 70 per cent fewer sweet drinks and there was almost a 70 per cent increase in participation in after-school sport.

Food Marketing and Promotion

There has been much debate, both nationally and internationally, regarding the influence that the marketing and promotion of energy-dense / nutrition-poor foods has had on the current childhood obesity epidemic being experienced in most western cultures (and increasingly in eastern cultures).

Nations worldwide are grappling with the issue of "junk-food" marketing to children. Many countries have established policies to limit childrens' exposure to marketing and promotion of energy-dense / nutrition-poor foods. The World Health Organisation's (WHO) Global Strategy on Diet, Physical Activity and Health discourages messages that promote less healthy dietary practices and encourages positive health messages in food and beverage advertisements aimed at children.

In 2006, WHO called for national action to protect children from marketing by substantially reducing the volume and impact of the commercial promotion of junk foods.

Recommendation

Obesity

- Recognise obesity, including childhood obesity, as a treatable chronic disease – consistent with the WHO definition.
- Implement Body Mass Index (BMI) benchmark testing of children to track trends in childhood obesity.
- Develop and implement health education, nutritional and physical education programs for children and young people.
- Introduce school wellness policy programs specifically targeted at securing student and teacher commitment to a nutrition and exercise program at school.
- Develop and implement a national advertising standard to limit the promotion and marketing of energy-dense / nutrition poor foods to children with appropriate regulatory controls, penalties and monitoring.

Type 2 diabetes and lifestyle

There is compelling evidence that physical inactivity is responsible for a large proportion of health conditions and diseases including type 2 diabetes, coronary heart disease, overweight and obesity and mental health problems.

More than half of all Australian adults (57%) are not achieving sufficient levels of physical activity for a health benefit. Almost 15% are completely sedentary and there is evidence that physical activity rates in Australia are declining (Armstrong et al., 2000).

Research indicates that some of the most inactive in the community are women with two or more children under school age; women aged 30 years or over; both men and women aged 40-50 years or older; people with a low socioeconomic status particularly those with less than 12 years of education; the Indigenous population and some populations from culturally and linguistically diverse backgrounds. (*Planning for Healthy Communities*, Victorian Government Department of Human Services, 2004)

From 1 July 2006, the Australian Government in partnership with the States and Territories introduced the **Australian Better Health Initiative: Promoting Good Health, Prevention and Early Intervention**. ABHI is a five year, \$500 million national package designed to reduce the impacts of chronic disease. In spite of the initiatives that have been implemented through programs such as ABHI, the prevalence of type 2 diabetes continues to escalate.

INTERNATIONAL RESEARCH INTO PRIMARY PREVENTION INITIATIVES

The Australian Government has already recognised the importance of providing advice on how to reduce risk factors for type 2 diabetes and of prevention programs specifically targeted at assisting with weight control and physical activity through the *National Chronic Disease Strategy* (2006).

Many international studies confirm the importance of community-based initiatives specifically designed to assist with weight control and physical activity as a key strategy in the reduction of the prevalence of type 2 diabetes in their communities.

- The **Finnish Diabetes Prevention Study (DPS)** demonstrates that the prevalence of type 2 diabetes can be reduced by modification of eating habits and physical activity

(Tuomilehto et al., 2001). The subjects' risk of diabetes decreased by 58% as a result of modifications brought about by nutritional and physical activity counselling.

- The **American Diabetes Prevention Program** tested both lifestyle modification intervention and medication to reduce the development of type 2 diabetes. The studies results found lifestyle modification programs achieved a 58% reduction in the incidence of diabetes.
- The **Chinese Da Qing IGT (Impaired Glucose Tolerance) and Diabetes** study focussed on interventions such as diet and exercise which achieved reductions of between 31% and 46% in the incidence of type 2 diabetes.
- The **Green Triangle (Victoria)** (Final report yet to be made public).

In Australia there are identifiable gaps in the provision of advice on how to reduce risk factors for type 2 diabetes and of prevention programs specifically targeted at assisting with weight control and physical activity. These gaps arise because of a lack of referral / access to appropriate lifestyle intervention programs and allied health care services and a lack of incentives and support for individuals wishing to make the required lifestyle changes to reduce the risk of developing type 2 diabetes.

Recommendation

Lifestyle

- Enhance provision of and access to nutrition and physical activity expertise for key high risk target groups.
- Increase access to prevention and early intervention programs aimed at increasing physical activity and healthy eating habits.
- Increase health insurance coverage (Medicare and Private) of lifestyle modification programs.

HEALTHY ACTIVE WORKPLACES:

The number of employed persons in Australia is approximately 10.3 million (Australian Bureau of Statistics Labour Force, Australia for January 2007). Australia's current workforce participation rate is 64.8%. **Most individuals spend one third of their waking hours at work.**

Workplace wellness is critical to the long-term availability and accessibility of a productive Australian workforce. A positive workplace culture specifically designed to promote healthy lifestyle and physical activity choices is essential to improving the health, wellness and productivity of the Australian workforce.

The business community is in a unique position to play a significant role in enhancing employees health and well-being through the implementation of a range of work based programs specifically targeted at nutrition and physical activity

Provision of support, information and incentives to encourage employer participation in a range of workplace nutrition, wellness and activity programs has the potential to significantly alter the long-term workforce prospects for Australian industry.

Recommendation

Workplaces

- Incentives for employers to provide opportunities for employees to undertake lifestyle modification programs, daily physical activities and better eating practices.
- Research into evidence-based population interventions to create a healthy and active Australia.

Healthy Active Transport and healthy built-environments

Chronic diseases such as type 2 diabetes are leading health concerns which are influenced by environmental conditions such as the built-environment and transportation. Planning the built-environment to include health and physical activity facilities is an important component of enhancing community physical activity and exercise.

Decisions regarding zoning, transportation, land use and community design influence individual decisions such as distances travelled to work, convenience of purchasing healthy foods and safety and attractiveness of neighbourhoods for walking and other physical activities.

In Australia, Commonwealth, State and Local governments need to work together to plan and develop active community infrastructure in every state.

BUILT-ENVIRONMENT AND HEALTH:

Physical inactivity is a complex problem and requires coordinated action from an individual, social, cultural and environmental perspective. In Australia, physical inactivity is associated with high direct health costs (conservatively) estimated at more than \$400 million per year (Bauman et al., 2002). About 8000 preventable deaths each year are associated with physical inactivity (Bauman et al., 2002). Both national and international evidence highlights the fact that the greatest public health gains can be achieved by encouraging small increases in physical activity among the least active people.

The built-environment (that is, the man-made physical structures and infrastructure of communities) is integral to enhanced physical activity and community health and wellness.

Areas of the built-environment which have been shown to be central to increasing activity and have direct community health benefits include:

- Environments that foster incidental and recreational activity.
- Nutrition-promotion environments which promote and provide safe, affordable, healthy food.
- Housing environments that are safe, affordable and available.
- Transportation that is safe, reliable, accessible and affordable.
- Environments that are well-maintained, appealing and clean to ensure a level of aesthetic ambiance.

TRANSPORTATION AND HEALTH:

According to the Australian Bureau of Statistics *Year Book Australia*, 2007:

- In the year ended 31 October 2004 there were 10.7 million registered passenger vehicles in Australia.
- Motor vehicles travelled an estimated total distance of 199,055 million kilometres in the year ended 31 October 2004; an average of 15,500 kms per vehicle.
- Private use accounted for 65% of the aggregate distance travelled.
- Of the total private use travel, 34% consisted of travel to and from work and 66% for personal and other use travel.
- 55% of trips were only within the capital city of the State or Territory in which the vehicle was registered.

There is no question that transport plays a key role in the social, economic and environmental aspects of the Australian community. However, there is emerging consensus that the excessive reliance in developed countries on motorised transportation has played a major contributory role in the decline in physical activity of communities.

In order to enhance physical activity throughout Australian communities, policies promoting a shift towards more walking and cycling as transport modes need to be considered. Public and non-motorised transport offer opportunities for regular physical activity, integrated into daily life at minimal cost for large segments of the population. Modal shifts to physically active transport are likely to bring major benefits to public health, the environment and quality of life.

Recommendation

Transportation and health

- Improved community planning and development to provide safe and accessible facilities to encourage physical activity.
- National and State transportation and built environment policies focussed on healthy active community participation.



Priority Area Three Detection

POLICY OBJECTIVE:

Targeted intervention for all high risk groups with specific focus on Aboriginal and Torres Strait Islander communities and especially their children with obesity and diabetes.

RECOMMENDED ACTION:

A Nationally Agreed Risk Assessment Tool for type 2 diabetes

- Refine, promote and implement a nationally agreed Risk Assessment Tool for type 2 diabetes accompanied by:-
 - a national social marketing campaign focused on the National Risk Assessment Tool to raise awareness of diabetes, identify those at high risk and those who are undiagnosed
 - a national Diabetes Risk Hotline and Website
 - General Practitioner incentive payments for reaching specified targets for diabetes risk assessment.

National Guidelines for Gestational Diabetes Screening

- Implement national guidelines for gestational diabetes screening.
- Establish a national recall system for diabetes screening following gestational diabetes.

A nationally agreed risk assessment tool for type 2 diabetes

The ability to identify the undiagnosed and those at high risk of developing type 2 diabetes is critical to the long-term reduction in the prevalence of type 2 diabetes and the consequent costs, individual, social and economic, of type 2 diabetes and its complications.

A nationally agreed and federally supported risk assessment tool is vital to improving early detection and diagnosis of type 2 diabetes and identifying those who have a high risk of developing type 2 diabetes.

AusDiab (Dunstan et al., 2002) found that the national prevalence of all types of diabetes in Australia was 7.4%. This equates to approximately 1.5 million Australians who have diabetes. Type 2 diabetes accounts for 85-90% of all people with diabetes in Australia.

Of the approximate 1.5 million people who have diabetes, AusDiab (2002) identified that:

- 50% of all people who already have type 2 diabetes are not yet diagnosed and so are at very high risk of developing irreversible complications by the time they are diagnosed
- a high proportion of Australians aged 25 years and over have significant risk factors for developing diabetes.

There is irrefutable evidence from international studies that the onset of type 2 diabetes can be prevented or at least significantly delayed. In addition, the adverse outcomes of diabetes can be prevented, delayed or ameliorated if diabetes is diagnosed early and managed well. As has been documented with targeted cancer awareness models throughout Australia, early detection is critical to effective treatment and management of chronic conditions.

If diabetes is undiagnosed or poorly controlled its complications can be devastating to the individual – microvascular disease (renal failure, visual impairment, blindness and erectile dysfunction) and macrovascular disease (heart disease, stroke and lower limb amputation) (DiabCo\$t, 2003) – and costly to the community in terms of increased need for medical care, limited workforce participation and lost productivity.

Recommendation

The refinement of a nationally agreed risk assessment tool for type 2 diabetes

- Based on internationally recognised risk assessment tools such as the Finnish.
- Adjusted to recognise Australia's multicultural & indigenous populations.
- Undertaken in community-based settings – GP surgeries and pharmacies – and through workplaces and community organisations.

To support the implementation of the Diabetes Risk Assessment Tool, Diabetes Australia strongly recommends that a national information, support and awareness strategy be developed to promote awareness of the Risk Assessment Tool itself, the risk factors associated with diabetes and ways of reducing these risks.

A National Diabetes Risk Hotline designed to provide a common national platform to support risk reduction and early intervention strategies is also suggested as an integral part of this information strategy. The Hotline would be an easily accessible, free service that provides advice on reducing modifiable risk factors as well as a telephone coaching support service for people who wish to commit to reducing their risk of developing type 2 diabetes.

Finally, a national website could provide a range of information, services and advice (including the nationally agreed risk assessment tool) and a referral system to appropriate primary and allied health care services specifically targeted at reducing modifiable risk factors.

Recommendation

- A national information, support and awareness strategy be developed to promote awareness of the **Risk Assessment Tool** itself, the risk factors associated with diabetes, and ways of reducing the risk, identify those at high risk and those who are undiagnosed.
- The strategy to include the establishment of a national Diabetes Risk Hotline and **website**.
- **General Practitioner incentive** payments for reaching specified targets for diabetes risk assessment.

ABSOLUTE RISK TOOL

The National Vascular Disease Prevention Alliance, comprised of Diabetes Australia, Kidney Health Australia, Heart Foundation and National Stroke Foundation, has been working on the development of an Absolute Risk Tool. The Department of Health and Ageing provided initial funding support for this project, while the National Heart Foundation is now financially supporting the work. The draft evidence-based guideline is nearing completion, after which it will go through a period of public consultation, as per NHMRC requirements.

The end aim of the project is the development of an absolute risk tool for CVD that can be used in General Practice.

Diabetes Australia supports funding by the Australian Government of the continued development and implementation of the Absolute Risk Tool for use in General Practice.

Gestational diabetes – screening guidelines and a recall system

The term diabetes in pregnancy includes women who had type 1 or type 2 diabetes prior to pregnancy (pre-gestational diabetes), as well as gestational diabetes (GDM).

Diabetes in pregnancy accounts for a significant proportion of adverse outcomes in pregnancy, and it also has long-term implications for both mother and child. It is common and increasing in frequency. Recent data suggests that GDM affects about 6-10% of all pregnancies. Type 2 diabetes in pregnancy has increased rapidly in parallel with the increase in type 2 diabetes generally.

Pre-gestational diabetes, especially type 2 diabetes, is associated with an unacceptably high rate of adverse outcomes. A recent Australian survey of 10 teaching hospitals found that the rate of stillbirths and major congenital malformations where the mother had pre-gestational diabetes was four times that of the general population. Data from a NSW database also found that infants exposed to pre-gestational diabetes mellitus were four times more likely to have major morbidity or mortality. These are potentially preventable events.

There is also increasing evidence that exposure to high sugar levels in pregnancy increases the future risk of obesity and diabetes to the child. These dramatic implications for the long-term health of our children, can be minimised by good control of diabetes in pregnancy.

Women with gestational diabetes are at high risk of developing diabetes. It has been estimated that one third of women with type 2 diabetes in Australia might have been identified earlier through the diagnosis of GDM. The diagnosis and treatment of GDM will improve pregnancy outcomes. It will also identify women who are at high risk for the future development of type 2 diabetes, thus facilitating targeted intervention to reduce diabetes risk.

Diabetes Australia supports screening for GDM to maximise detection and early diagnosis of diabetes in pregnancy, to identify those at high risk of developing type 2 diabetes.

Diabetes Australia also supports a GDM recall system, similar to the cervical screening program, to facilitate the early diagnosis of type 2 diabetes, enabling its early treatment before the onset of complications.

Universal screening for GDM has been recommended by the Australian Diabetes Society, Australasian Diabetes in Pregnancy Society, and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Universal screening for GDM has also been identified as a priority area for action by the National Diabetes in Pregnancy Advisory Council (under the auspices of DOHA). The Australasian Diabetes in Pregnancy Society, and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists have issued guidelines for diabetes screening following GDM recall.

Recommendation

Gestational diabetes

- Provide funding and support for the delivery of accredited diabetes specific training programs particularly through Indigenous Training Colleges.



Priority Area Four Management

POLICY OBJECTIVES:

- Increased affordability and access to health care professionals and services for all people with diabetes (as an integral component of self-management).
- Expansion of the National Primary Care Collaboratives.
- Expansion the National Health Workforce.
- Implementation of a nation-wide program of training and recognition for Aboriginal and Torres Strait Islander Health Workers.

RECOMMENDED ACTION:

Increase affordability and access to health care professionals and services by:

Medical Benefits Schedule

- Expand rebatable items under the Medicare Benefits Schedule for early intervention programs to assist in improved self-management.
- Expand the number of visits covered under the Medicare Benefits Schedule for allied health care services.
- Increase the length of consulting sessions available for allied health care services particularly those related to sessions with Credentialed Diabetes Educators and psychologists.
- Extend MBS items under the *Better Access to Mental Health Care Initiative* to allow direct referral by Endocrinologists of people with diabetes to psychologists.

Health Insurance

- Expand health insurance coverage (Medicare and Private) of early intervention programs for those newly diagnosed with diabetes and pre-diabetes.

Health Care Card

- Expand Health Care Card access for 16–18 year olds with a chronic disease (type 1 diabetes, type 2 diabetes etc).

National Primary Care Collaboratives

- Expand the National Primary Care Collaboratives across all Divisions of General Practice.
- Enhance the current participation of General Practitioners in diabetes information management systems.

Health Workforce

- Develop and implement incentive programs to recruit and retain individuals to allied health and primary care professions.
- Enhance opportunities for individuals entering into diabetes health care training.

Indigenous Health Workforce

- Provide funding and support for the delivery of accredited diabetes specific training programs particularly through Indigenous Training Colleges and TAFEs.
- Advance the role and status of Indigenous Health Workers through the development and implementation of a uniform national training and registration system that facilitates entry into a clear career pathway in health service provision.
- Introduce appropriate workplace recognition for Aboriginal and Torres Strait Islander Health Workers.

Access to Insulin Pumps

- Provide Insulin Pumps to people with type 1 diabetes under the age of 18 and pregnant women with type 1 diabetes.

INTRODUCTION

Effective management is critical for all types of diabetes (type 1, type 2 and gestational diabetes).

Diabetes Australia supports best practice management of diabetes through a multidisciplinary team approach which includes the broadest possible range of health, nutrition, exercise, counselling, support and information being available to people living with diabetes, the newly diagnosed and those at high risk of developing type 2 diabetes.

Affordability of and access to health care professionals, products and services is critical to people living with diabetes and to best practice management. Diabetes Australia acknowledges that the subsidised products (blood glucose test strips and other consumables) provided by the Australian Government under the National Diabetes Services Scheme (NDSS), are critical to the affordability of diabetes in Australia.

There are however other policies which would increase both the affordability and access to services.

MEDICARE BENEFITS SCHEDULE (MBS)

The Australian Government has recognised the importance of a multidisciplinary health team approach for the diagnosis and management of diabetes. Under the current Chronic Disease Management strategy (introduced in July 2005), access to a range of rebatable services is available through:

- The GP Management Plan (MBS item 721)
- The Indigenous Child Health Check (MBS item 708)
- The Indigenous Adult Health Check (MBS item 710)
- Over 75s assessments (MBS items 700 or 702)
- Over 55s Indigenous assessments (MBS item 704 or 706)
- 45 year old health check (MBS 717)
- The health assessments for refugees and other humanitarian entrants (MBS items 714 or 716)

These items allow for eligible patients in a 12 month period to access Medicare rebates for up to five allied health and three dental care services (*if a GP Management Plan and the requirements for Team Care Arrangements have been fulfilled*).

However, uptake of allied health programs particularly lifestyle modification programs, is restricted by limits placed on consultation times required to receive Medicare rebates (for example 20 minutes sessions for Credentialed Diabetes Educators).

Recommendation

Medicare benefits schedule

- Expands the rebatable items available under the Medicare Benefits Schedule for early intervention programs to assist in improved self-management.
- Expands the number of visits covered under the Medicare Benefits Schedule for allied health care services.
- Increases the length of consulting sessions available for allied health care services particularly those related to sessions with Credentialed Diabetes Educators.

REFERRAL BY ENDOCRINOLOGISTS TO PSYCHOLOGISTS UNDER THE BETTER ACCESS INITIATIVE

Chronic diseases such as diabetes cause significant stress and can have a serious psychological impact.

While the intention of the *Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule Initiative (Better Access initiative)* is clearly to provide improved access to Psychological Counselling Services, this initiative currently only allows referral by General Practitioners, Psychiatrists and Paediatricians.

In diabetes care, the group most likely to be in need of and benefit from psychological counselling and intervention is the group which is managed predominantly by an endocrinologist - people with type 1 diabetes and complex type 2 diabetes. Yet Endocrinologists are, currently, unable to refer their patients to Psychological Counselling Services under the Better Access initiative.

This issue is particularly important for young people with type 1 diabetes. Requiring a young person to attend a General Practitioner to obtain referral to a Psychologist may mean that an important component of care does not occur.

Recommendation

Referral By Endocrinologists

- Extend MBS items under the Better Access to Mental Health Care Initiative to allow direct referral by Endocrinologists of people with diabetes to psychologists.

HEALTH CARE CARDS (HCC)

Under current health policy, children under 16 years may qualify for a health care card, which allows a qualified person to receive a supplementary payment each fortnight. Once a person with type 1 diabetes reaches the age of 16, the current health policy states that they are only to be covered by a concession card if:

- they receive an income support payment themselves (for example Youth Allowance or Disability Support Pension)
- they qualify for the low-income HCC in their own right or
- their family is on a low income and qualifies for a HCC.

Unfortunately, just because a child reaches the age of 16 does not mean that their diabetes becomes any less life threatening or costly, quite the contrary.

New research currently being finalised on young people living with type 1 diabetes and transitioning from paediatric to adult care, indicates that the period from 16 – 24 years of age is actually the most trying and difficult in many young peoples lives. Under the current system, young people with type 1 diabetes are unfairly burdened by the loss of access to the health care card particularly if these young people remain at school or continue with additional tertiary education that precludes them from accessing assistance. This in turn places increased financial strain on many families who are continuing to have to support their sons and daughters with the condition whilst being ineligible to secure government assistance that they were previously entitled to.

Recommendation

Health Care Card

- Expand Health Care Card access for 16–18 year olds with a chronic disease (type 1 diabetes, type 2 diabetes etc).

ACCESS TO INSULIN PUMPS

Since 2004, children with type 1 diabetes under the age of 18 and pregnant women with type 1 diabetes have had access to insulin pump consumables subsidised under the National Diabetes Services Scheme. An insulin pump provides a child or pregnant woman with a slow feed of insulin, more closely mimicking the natural action of their pancreas and therefore providing increased protection from the complications of diabetes, such as blindness, peripheral vascular disease and macrovascular disease.

However, access to this improved management and the improved health outcomes pumps can deliver for children and pregnant women is limited due to the cost of purchasing the insulin pump, with most pumps costing up to \$8,000.

There are currently approximately 8,500 children with type 1 diabetes in Australia. Of these nearly 7,500 do not have access to an insulin pump. Diabetes Australia supports the provision of insulin pumps, funded by the Australian Government, to children under the age of 18 years of age.

While there is a significant initial cost, the total cost is expected to be no greater than \$65m over the first four years of this program. In addition, through the National Diabetes Services Scheme, administered by Diabetes Australia on behalf of the Australian Government, there is an existing mechanism in place to manage this scheme.

Recommendation

Access to insulin pumps

- Provide Insulin Pumps to people with type 1 diabetes under the age of 18 and pregnant women with type 1 diabetes.

PRIMARY CARE COLLABORATIVES

The Australian Government has allocated \$14.6 million over three years to establish the National Primary Care Collaboratives (NPCC) to improve the quality of primary care, focusing on diabetes, coronary heart disease and access to primary care. The current level of funding allows 600 general practices from 25 Division of General Practice to participate (approximately 20% of Australian Divisions of General Practice). Practices that have participated in the first wave of the NPCC have recorded a 35% increase in Diabetes Service Incentive Payments (Annual Cycle of Care) claimed. Implementing more annual cycles of case results in better management of diabetes.

Diabetes Australia is committed to the NPCC approach and believes that the expansion of this model to include all Divisions of General Practice will deliver tangible benefits to people with diabetes by way of improved diabetes management.

Technology and systems to facilitate better management and care of the diagnosed are critical. Diabetes Australia supports the expansion of the NPCC and the information systems supporting the NPCC.

Recommendation

Primary care collaboratives

- Expand the National Primary Care Collaboratives across all Divisions of General Practice.
- Increase in the current participation of General Practitioners in diabetes information management systems.

HEALTH WORKFORCE

People with diabetes require access to care provided by a multidisciplinary team including, but not limited to, medical practitioners (general and specialists), diabetes educators, dietitians, podiatrists, exercise physiologists and physiotherapists, social workers and psychologists.

Strengthening the health system and its infrastructure has been identified by the Governments of Australia as one of the four major health priority areas. Diabetes Australia regards the development of the health care workforce as essential to the long-term viability of Australia's health care system and a more coordinated, multidisciplinary approach to diabetes management and care.

CREDENTIALLED DIABETES EDUCATORS

Access to comprehensive diabetes self-management education is critical to the long-term success of reducing diabetes related complications.

Credentialed Diabetes Educators (CDE) are the providers of diabetes self-management education recognised by the Health Insurance Commission and the Department of Veterans Affairs for rebatable diabetes education services. CDEs include Registered Nurses (Division One Nurses in Victoria), Accredited Practising Dietitians and Registered Pharmacists Accredited for conduct of Medication Management Reviews who have also completed a graduate certificate in diabetes education, have a minimum of 1800 hours experience in the practice of diabetes education and who meet other professional requirements of the Australian Diabetes Educators Association Credentialing Program. CDEs play lead roles in coordinating diabetes care in the general practice setting.

Diabetes Australia supports a series of policies to improve access to and affordability of comprehensive diabetes self-management education and to ensure the long-term sustainability of this specialised workforce.

Practice Nurses

Play an important role in the organisation and delivery of chronic disease care programs in general practice. Practice Nurses are also increasingly undertaking further study in order to participate

in the care of people with diabetes in the general practice setting.

Access to multidisciplinary allied health care and comprehensive diabetes self-management education is limited in the primary care settings. In particular, access to Credentialed Diabetes Educators is low because of:

- Inconsistently targeted and/or dedicated funding at both Federal and State / Territory levels – currently there are more course graduates than available positions in health services including primary care settings.
- Limited consumer entitlement to Medicare Allied Health rebates.
- Private health insurance rebates for diabetes self-management education services vary across providers.
- Low General Practitioner referral rates.
- Lack of consumer awareness of the availability of diabetes self-management education and Credentialed Diabetes Educators.
- No mechanism for diabetes specialists to refer for Medicare rebatable services.

Recommendation

Health workforce

- Provide opportunities for graduates from the Graduate Certificate in Diabetes Education to obtain the requisite experience to attain Credentialed Diabetes Educator status.
- Fund graduate positions in existing diabetes teams in State and Territory health services.
- Set Medicare rebates at an adequate level that accounts for the different type and length of services provided by Credentialed Diabetes Educators to make private practice in diabetes a more viable option.
- Include diabetes self management education under the broader health cover suite of programs and promote consistent quality standards for diabetes self management education rebated under private health insurance.
- Provide MBS item numbers for services provided by Credentialed Diabetes Educators on behalf of General Practitioners (as recommended by the Productivity Commission in its report on the Health Workforce).
- Develop and implement incentive programs to recruit and retain individuals to allied health and primary care professions.
- Enhance opportunities for individuals entering into diabetes healthcare training.

INDIGENOUS HEALTH WORKERS

The prevalence and impact of type 2 diabetes on the Indigenous population in Australia is catastrophic. Indigenous Health Workers are uniquely placed to work with and improve the health of their communities. They are integral members of the multidisciplinary teams that provide access for Indigenous people to the full range of health care required for effective management of diabetes. Unfortunately, the role of Indigenous health workers within the Australian primary and allied health care setting has been undervalued for many years. According to the Australian Institute of Health and Welfare, Indigenous Australians' health status is, on average, three times poorer than that of other Australians.

The levels of inequity in access to health services within Australia's Indigenous communities are well documented. Indigenous Australians experience an earlier onset of most chronic diseases, have more GP consultations for the management of certain diseases and are more likely to be hospitalised than other Australians. For example, the prevalence of diabetes among Indigenous Australians was nearly four times the prevalence reported by non-Indigenous Australians.

The most effective way to make fundamental change within the Indigenous population is to engage communities in the development and implementation of disease prevention and management strategies. In order to effectively deliver targeted programs within Indigenous communities it is essential to build the capacity of the communities and Indigenous Health Workforce to deliver diabetes and other chronic disease prevention and control programs.

Increased Indigenous Health Workforce capacity is dependent on advancing the skills, role and status of Indigenous Health Workers.

Current initiatives available for further education and training for Indigenous Health Workers include:

- Diabetes Management in the General Care Setting; a nationally recognised diabetes training program developed by the National Association of Diabetes Centres;
- Diabetes Prevention and Control Program for Health Workers provided by Marr Mooditj Training College in Perth.

Marr Mooditj Foundation is an organisation dedicated to the education and training of Aboriginal people in Primary Health Care. The Foundation's Charter extends beyond the initial teaching and encourages Aboriginal and Torres Strait Islander people working in the health and community services field to continue to seek further training to further develop skills and experience

which will enhance and increase opportunities for Aboriginal and Torres Strait Islander Australians. This will allow for a fuller engagement in the economic, social and cultural life of Australia, with the same range of choices available as other Australians.

Marr Mooditj Foundation offers the following courses: Certificate III in Community Services; Home and Community Care (HACC); Mental Health Work; Certificate III and IV in Aboriginal Primary Health Care Work; Diploma of Aboriginal Primary Health Care; Diploma of Aboriginal Mental Health Care; Diploma in Lifestyle (Cardiovascular, Diabetes and Renal).

Recommendation

Indigenous health workers

- Provide funding and support for the delivery of accredited diabetes specific training programs particularly through Indigenous Training Colleges and TAFEs.
- Advance the role and status of Indigenous Health Workers through the development and implementation of a uniform national training and registration system that facilitates entry into a clear career pathway in health service provision.
- Introduce appropriate workplace recognition for Aboriginal and Torres Strait Islander Health Workers.
- Increase the number of allied health visits available under the MBS for Indigenous people.
- Remove the barriers for referral to allied health services for Indigenous people.
- Invest in the 'cash out' options to facilitate employment of allied health workers in providing health care / chronic disease management programs for defined Indigenous populations.
- Support Indigenous people to undertake mainstream health discipline training in nursing and allied health disciplines.



Priority Area Five Cure

POLICY OBJECTIVES:

- Increased funding and resources for research into all aspects of all types of diabetes.

RECOMMENDED ACTION:

- The Australian Government to partner with Diabetes Australia, the community and business sectors, by matching, dollar for dollar the research dollars raised by Diabetes Australia's Research Trust (\$3 million in 2006).
- Increase Government support and financial contributions to diabetes research in Australia including increased incentives for medical researchers to study and practice within Australia
- Funding of research into diabetes in pregnancy.
- Funding for phase 3 of AusDiab – a 10-year follow-up of the AusDiab cohort (study population 1), combined with the establishment of a new, national cohort (study population 2).

Medical research

Diabetes Australia supports national investment in strategic and applied research to maintain our competitive edge within an increasingly global economy. Medical research is expensive in terms of both the time and financial commitment required for achieving fundamental advancements. Nevertheless it has been the cornerstone of medical advancements throughout history.

Research Australia reported in September 2005 that Australians look to Medical Research for better health and economic gains.

- Australians identify health and medical research as an important priority for the Australian Government now and in the future.
- 82% of Australians rated health and medical research as an important priority for the Federal Government over the next 2-3 years.
- Against the backdrop of rising levels of excess weight throughout the population, 18% of Australians want more resources focussed on diabetes research with 11% wanting to see more effort into research to tackle obesity.
- 75% strongly agree that modern health care is expensive therefore disease prevention is of paramount importance.

- More than 50% of Australians believe the Australian Government funding for health and medical research should be much more than the 0.12% of GDP it received in 2003.

Diabetes Australia is a significant contributor to diabetes research across the country dedicating over \$3 million in 2006/2007 to research activities. Diabetes Australia is committed to ensuring greater priority is given to diabetes research for all types of diabetes (type 1, type 2 and gestational diabetes) and across the full spectrum of the disease – awareness, prevention, detection, management with the ultimate aim of one day finding a cure.

Recommendation

Medical Research

- The Australian Government to partner with Diabetes Australia, the community and business sectors, by matching, dollar for dollar the research dollars raised by Diabetes Australia's Research Trust (\$3 million in 2006).
- Increase Government support and financial contributions to diabetes research in Australia including increased incentives for medical researchers to study and practice within Australia.

Research into diabetes in pregnancy

There are important research questions pertaining to diabetes in pregnancy which, if answered, could lead to improved immediate and long-term outcomes. These include public health, clinical, and basic research into:

- The high incidence of adverse outcomes in pregnancies affected by type 2 diabetes. Whether socio-economic factors predispose to increased risk. Measures that could be undertaken to reduce the incidence of adverse events including social, public health, and medical interventions.
- The Patho physiological mechanisms for adverse outcomes in diabetic pregnancy.
- Public health programs that are cost effective ways to target large numbers of women with GDM to reduce their future risk of developing diabetes.
- The magnitude of the effect of foetal programming by diabetes; how does it occur, and apart from diabetes and obesity, are there other conditions that it may predispose to. Are there metabolic factors other than glucose which lead to this foetal programming. Can the effects be prevented or reversed.

Recommendation

Pregnancy

- Funding of further research into diabetes in pregnancy to improve clinical and public health outcomes.

AusDiab Phase 3

Phase one of the Ausdiab Study was undertaken in 1999/2000 (ID1, 2001). It used clinical diagnoses to uncover undiagnosed type 2 diabetes as well as diagnosed population prevalence. This study was the first to describe the national prevalence of diabetes, obesity and chronic kidney disease.

Assessment of a wide range of risk factors for diabetes, obesity, chronic kidney disease (CKD) and cardiovascular disease (CVD) in AusDiab (2001) has enabled analyses of the interactions between these common chronic disorders and the degree to which they share common antecedents and hence may be amenable to common interventions. The data has been utilised in analyses and planning at major NGO and Governmental levels.

However this data collected in 1999 is now dated. In particular, it is likely that age-gender prevalence rates of type 2 diabetes have increased significantly since 1999.

Diabetes Australia believes that it is important that another epidemiological study is undertaken now using similar methods to AusDiab in order to make more accurate current estimates and analyse rates of changes and trends to inform policy.

Diabetes Australia supports funding for phase 3 of AusDiab - a 10-year follow-up of the AusDiab cohort (study population 1), combined with the establishment of a new, national cohort (study population 2).

The primary aims of Phase 3 of AusDiab are to:

1. Describe the natural history of glucose intolerance, and CVD risk markers over 10 years.
2. Determine the CVD outcomes associated with glucose intolerance, and kidney disease, and to develop an absolute CVD risk score.
3. Measure the secular changes in prevalence of diabetes, obesity, diabetes and CVD risk factors, and CKD over the 10 years from 1999/2000 to 2009/2010.
4. Determine the current national prevalence of diabetes, obesity, CKD, eye disease, heart failure and risk factors for diabetes and for CVD.
5. Establish a national cohort to be followed up to allow a comparison of their outcomes in the 2nd decade of the 21st century, with the outcomes of the original AusDiab cohort in the 1st decade.

AusDiab phase 3 will thus provide important information on the burden, trends and risks for a set of chronic diseases that comprise a major component of the health problems and their financial burden currently faced by Australia.

Recommendation

AusDiab

- Fund for phase 3 of AusDiab - a 10-year follow-up of the AusDiab cohort (study population 1), combined with the establishment of a new, national cohort (study population 2).

References

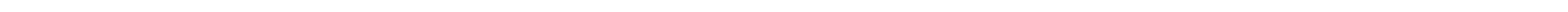
Access Economics, *The Economic Costs of Obesity*; report by Access Economics to Diabetes Australia, October 2006

AIHW Australia's Health 2004

Colaguri S, Colaguri R, Conway B, Grainger D, Davey P. *DiabCo\$t Australia: Assessing the burden of Type 2 Diabetes in Australia*, Diabetes Australia, Canberra, December 2003.

Dunstan et al, AusDiab, 2002

National Diabetes Services Scheme (NDSS) Database





National Office GPO BOX 3156 CANBERRA ACT 2601
Level 5, 39 London Circuit CANBERRA ACT 2600
P +61 2 6232 3800 F +61 2 6230 1535
admin@diabetesaustralia.com.au