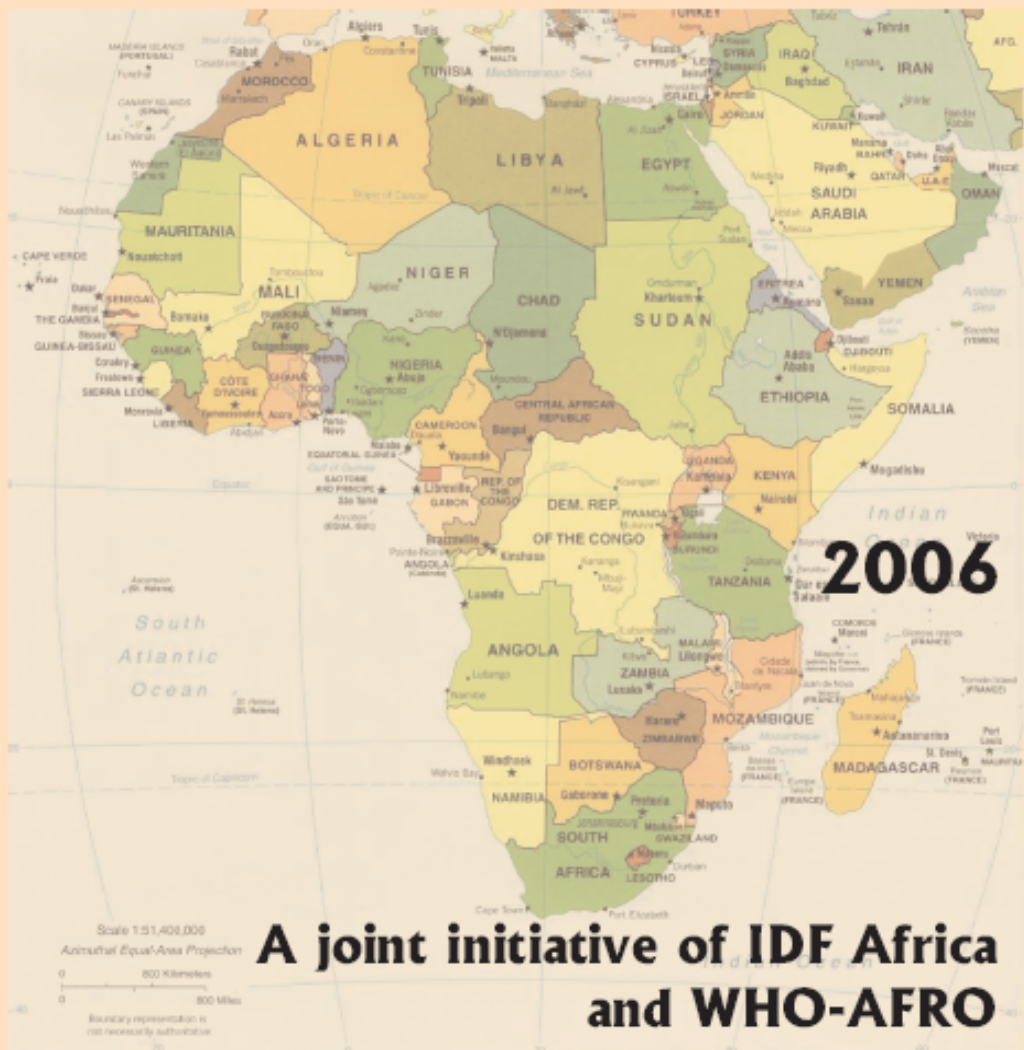


# The Diabetes Strategy for Africa

## An Integrated Strategic Plan for Diabetes and Related Health Risks



# The Diabetes Strategy for Africa

A joint initiative of the International Diabetes Federation – African Region in partnership with the WHO-AFRO and targetted at all countries covered by the African Union

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### **In Nairobi, Kenya** (162 participants from the following countries):

Eritrea	Sudan	Angola	Tanzania (Mainland)
Mozambique	Ethiopia	South Africa	Pemba
Rwanda	Zimbabwe	Cameroon	Zanzibar
Zambia	Gambia	Kenya	Democratic Republic of Congo
Seychelles	Senegal	Uganda	

### **In Yaoundé, Cameroon** (118 participants from the following countries):

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Gabon	Congo Brazzaville	Togo	Cameroon
Burkina Faso	Niger	Mali	

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## Preface

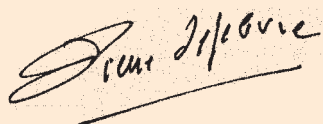
Towards a brighter future

Countless people with diabetes in Africa remain trapped on the wrong side of a global health divide that makes even the most basic care a distant dream.

Increasing numbers of families affected by diabetes live not only without access to essential diabetes medications and supplies; they struggle to survive without the most basic of human rights - access to healthcare, education and, in an ever increasing number of communities, decent food and clean water. This is scandalous.

Yet, there is hope. The challenges to the diabetes community in this vast continent are many poverty, corruption, mismanagement of resources and weak healthcare structures are among the (sadly) common encounters. But other more promising patterns also emerge as described in this Declaration and Strategy Document. Promise for a brighter future for people with diabetes in Africa lies in such collective efforts.

Consistent with its mission, the International Diabetes Federation remains committed to working together with governments and other stakeholders within the diabetes community to improve access, care and quality of life for people with diabetes in Africa.

A handwritten signature in black ink, reading "Pierre Lefebvre", with a horizontal line underneath.

**Pierre LEFEBVRE**  
President  
International Diabetes Federation

## Abbreviations

HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
IDF	International Diabetes Federation
IDF-Africa	International Diabetes Federation Africa Region
IEC	Information, education and communication
GDM	Gestational diabetes mellitus
HbA1c	Glycated haemoglobin
MoH	Ministry of Health
NCD	Non Communicable Disease
NGO	Non Government Organisation
OxHA	Oxford Health Alliance
PADSG	Pan African Diabetes Study Group
PHM	People's Health Movement
STEPS	The WHO STEPwise approach to Surveillance of chronic noncommunicable diseases
WHO	World Health Organization
WHO-AFRO	World Health Organization Regional Office for Africa
\$	United States Dollar

# The African Diabetes Declaration

## Preamble

As a region of predominantly developing nations, Africa is on the brink of an epidemic of diabetes in which the toll, already devastating, will be immeasurable. Already many people, including children, die from lack of insulin, and it is likely that many die of diabetes before even having the opportunity to be diagnosed let alone treated. Still more suffer debilitating consequences of diabetes such as amputation and blindness. The cost of diabetes is huge. It impacts on everyone and will grow, yet, with relatively small investments diabetes can be controlled and even prevented through simple interventions.

## The Declaration

The IDF-Africa, the WHO-AFRO and the African Union call on governments of African countries, non-government organisations, international donor agencies, industry, health care providers and all partners and stakeholders in diabetes to ensure:

- Adequate, appropriate and affordable medications and supplies for people with diabetes
- Earlier detection and optimal quality of care of diabetes
- Effective efforts to create healthier environments and prevent diabetes
- The identification and dissemination of information, education and communication to empower people with diabetes to access appropriate diabetes services and improve self care
- Equitable access to care and prevention services for people with or at risk of diabetes
- Awareness of diabetes in the community and among health care providers
- A truly integrated approach which utilises the whole health workforce to address infectious and non-communicable diseases simultaneously
- Government commitment to reducing the personal and public health burden of diabetes
- Partnerships and collaboration within and between government sectors, private sectors, non-government organisations and communities to create community and workplace environments that promote better health.



## Executive Summary

The global threat of diabetes is immense and increasing. Africa will not - and is not escaping the impact of diabetes. Already, it is caught in a double burden of infectious diseases and emerging chronic diseases which are accompanying the transition from hunter-gatherer and agriculture-based to industrial economies which is currently occurring in many African countries.

Africa generally suffers a lack of resources. Natural energy such as gas and coal is limited and agricultural production is severely inhibited by persistent drought. Many countries are plagued by political instability, internal factional hostilities, civil unrest, virtually no public infrastructure and all experience economic problems. From a health perspective this is exacerbated by a massive burden of infectious diseases, notably HIV/AIDS that alone has the potential to threaten the economic viability of sub-Saharan Africa. Sadly, HIV/AIDS is not the only health threat facing Africa but decision-making processes for determining which of a range of competing health priorities and determinants of disease to fund are lacking and the significance of the increase in chronic diseases such as Type 2 diabetes on the physical and economic well being of the people and countries of Africa has been virtually ignored.

### *The burden of diabetes in Africa – the bad news*

In the 15 years leading up to 2010 diabetes in Africa is increasing by 93% (IDF, 2003) and the WHO (2005) estimates that around 80% of deaths from diabetes, heart disease, cancers and respiratory disease will occur in developing countries. Those most affected will be in the productive phase of the life cycle.

Undetected, untreated or poorly controlled diabetes can result in devastating long term complications such as blindness, amputation, or kidney disease and life threatening short-term complications such as ketoacidosis, or severe hypoglycaemia. Add to this the unknown number of people who die from lack of insulin supplies in many African countries and it is clear that, if not addressed as a matter of urgency, diabetes will soon threaten the economic viability of many African countries and, sadly, many people who survive HIV/AIDS may die of diabetes.

### *The case for intervening – the good news*

Despite the current burden of diabetes there is hope and a way forward. There is now an undeniable evidence base describing the impact of diabetes and equally convincing scientific evidence that:

- The onset of Type 2 diabetes can be significantly delayed or prevented
- Many of the complications of diabetes can be prevented or significantly delayed.

The WHO (2005) points out that we already know what to do as evidence and experience from around the world indicates that:

- 80% of diabetes, heart disease and stroke can be prevented and this can be achieved at relatively low cost and without the need for expensive “high tech” equipment
- when a country invests in diabetes the effect of that investment also yields substantial returns in reducing heart diseases, stroke, kidney disease, obesity, hypertension, dyslipidaemia, smoking, and health related quality of life
- a 2% reduction in chronic disease rates over the next 10 years would save 36 million deaths by 2025
- saving 36 million deaths from chronic diseases over the next 10 years would result in an accumulated growth of \$36 billion for China, \$15 billion for India and \$20 billion for the Russian Federation – proportionately equivalent benefits would also apply to Africa
- everyone from the village health worker to a large corporation can do something about it
- the evidence for preventing diabetes and its complications is so overwhelming that there is no longer any excuse for not intervening
- comprehensive and integrated action at country level led by governments, is the means to achieve success.

### *The call to action – African Diabetes Declaration*

In recognition of the burden of diabetes and the evidence for the likelihood of successful intervention, and following on from 3 previous diabetes declarations - the European St Vincent Declaration (1986), the Declaration of the Americas (1996) and the Western Pacific Diabetes Declaration (2000) - the IDF-Africa has developed a diabetes declaration covering the countries of sub-Saharan Africa in partnership with the WHO-AFRO and the African Union.

### **The Declaration**

The IDF-Africa, the WHO-AFRO and the African Union call on governments of African countries, non-government organisations, international donor agencies, industry, health care providers and all partners and stakeholders in diabetes to ensure:

- Adequate, appropriate and affordable medications and supplies for people with diabetes
- Earlier detection and optimal quality of care of diabetes
- Effective efforts to create healthier environments and prevent diabetes
- The identification and dissemination of information, education and communication to empower people with diabetes to access appropriate diabetes services and improve self care
- Equitable access to care and prevention services for people with or at risk of diabetes
- Awareness of diabetes in the community and among health care providers
- A truly integrated approach which utilises the whole health workforce to address infectious and non-communicable diseases simultaneously
- Government commitment to reducing the personal and public health burden of diabetes
- Partnerships and collaboration within and between government sectors, private sectors, non-government organisations and communities to create community and workplace environments that promote better health.

### *The plan of action – the Diabetes Strategy for Africa*

The Strategy presents a framework and implementation options for operationalising the nine points of the Declaration and is based on two primary and two supporting goals:

#### **Primary Goals**

- Prevent diabetes and related non-communicable diseases
- Improve quality of life and reduce morbidity and premature mortality from diabetes

#### **Supporting Goals**

- Build the capacity of health systems to provide fair and equal access to high quality diabetes prevention, care, education, support services and supplies
- Conduct relevant research to continually improve our knowledge and ability to

prevent, delay and manage diabetes to reduce its impact and assess the impact of care

In addition to these goals, the framework on which the Strategy is built articulates a Mission of equitable and affordable access to prevention and care for people with or at risk of diabetes and sets out a Vision of what, ideally, could and should be. It proposes implementation options and pathways at regional and country levels and provides examples of appropriate models for settings with minimal, medium, and more advanced infrastructure, and suggests a framework outlining some desired broad outcomes including:

- recognition of diabetes as a health priority by the governments of sub Saharan countries
- the number of countries with active plans for preventing diabetes and its complications
- the introduction and maintenance of systems to manage and monitor diabetes.

## **Overarching Strategies**

The Strategy proposes a set of key strategies which can be summarised under:

### ***1. Advocacy***

This is about making diabetes everybody's business and combines the notion of individual, community, social, corporate and government responsibility. It argues that diabetes affects everybody in some way and so should be the responsibility of everyone (eg individuals; communities; the health sector and all government sectors including agriculture, transport, education, sport, tourism; small business, industry and other corporations) to address the determinants of diabetes and related chronic diseases and conditions.

### ***2. Mobilisation of resources***

This recognises that the likelihood of substantial new resources to dedicate to diabetes is limited in many countries and advocates an approach that is truly integrated and uses the platform of both infectious and chronic diseases to address these threats simultaneously. For example, all primary care workers should be equally and adequately skilled to provide risk reduction and basic care for both diabetes/cardiovascular disease and HIV/AIDS. It also encompasses the notion of capacity building to achieve optimal effectiveness of resource allocation and use, clear prioritisation, health professional and service role delineation, and the reduction of waste through duplication and fragmentation.

### ***3. Empowerment***

The concept of empowerment for self determination in health is about encouraging full engagement of all levels and facets of society in taking responsibility for health as a fundamental common asset. It refers to individuals, communities and nations alike and is central to, and cuts across all strategies.

#### **Specific Strategies**

These centre around risk factor reduction, earlier detection and treatment of undiagnosed diabetes, and systems and models aimed at improving the quality and availability of care and services and the affordability of essential medications and supplies.

#### **The Bottom Line**

The Diabetes Strategy for Africa has a recurring theme e.g.

- Diabetes in Africa is not just a threat to physical and economic health but an evolving reality
- Diabetes and its complications are largely preventable through relatively simple interventions
- The cost of intervening will be cheaper than the cost of not intervening
- An investment in diabetes brings health gains in other disease areas

The time to act is now. There is no need to wait for further evidence because we already know what to do about diabetes. The crux of the matter is that everyone has the capacity to do something about it, even countries with low infrastructure and minimal resources. What is required is advocacy to ensure that awareness is raised and the required political will to act is sparked and maintained.



# Introduction and Framework

## Purpose and focus

The Diabetes Declaration and Diabetes Strategy for Africa cover those sub-Saharan African countries, which fall into what is generally described as East Africa, West Africa, Central Africa and Southern Africa. They focus on the three major forms of diabetes - Type 1 diabetes, Type 2 diabetes and gestational diabetes. The vision, recommendations and strategies proposed in the Declaration and Strategy span the continuum of care from pre-diabetes through diagnosis, routine monitoring and care, to the onset of complications and palliation.

The Declaration and Strategy target politicians, health care funders, planners, policy makers and providers, all public sectors, non-government organisations, all relevant industry sectors and private business, and the community generally to act to reduce the public and personal cost of diabetes.

### The Declaration is a “*Call to Action*”

The purpose of the African Diabetes Declaration is to raise community and political awareness about diabetes. Specifically, it seeks to:

- Bring the magnitude of the burden of diabetes in African countries into the public arena for debate as a health, social and economic issue of major importance to Africa
- Raise community, corporate, professional and political conscience and will to act on the nine vital points of the Declaration in order to stem the rising tide of diabetes in Africa.

### The Strategy is a “*Plan of Action*”

The Diabetes Strategy for Africa describes a shared vision and plan for operationalising the call to action set out in the Declaration. It provides an overarching framework of agreed principles, goals and strategies and outlines a way forward to achieve this shared vision. Its purpose is to set out a broad plan of action that:

- Provides a clear rationale that illustrates the benefits of intervening to reduce the public and personal burden of diabetes versus the consequences of not intervening
- Presents a generic prototype for action based on evidence and international consensus
- Proposes a range of models and options for diabetes prevention and care which can be adapted to the different health system contexts and structures prevailing in those African countries which are at varying stages of the continuum of industrialisation.

## Geographical scope

The African Diabetes Declaration and Strategy target all countries covered by the partner organisations which are the International Diabetes Federation African Region (IDF-Africa), the African Regional Office of the World Health Organisation (WHO-AFRO) and the African Union (AU). The scope of this document is in the following countries:

Algeria	Liberia
Angola	Libya
Benin	Madagascar
Botswana	Malawi
Burkina Faso	Mali
Burundi	Mauritania
Cameroon	Mauritius
Cape Verde	Mozambique
Central African Republic	Namibia
Chad	Niger
Comoros	Nigeria
Congo	Rwanda
Democratic Republic of Congo	Saharawi Arab Democratic Republic
Cote d' Ivoire	Sao Tome and Principe
Djibouti	Senegal
Egypt	Seychelles
Equatorial Guinea	Sierra Leone
Eritrea	Somalia
Ethiopia	South Africa
Gabon	Sudan
Gambia	Tanzania
Ghana	Togo
Guinea	Tunisia
Kenya	Uganda
Kingdom of Lesotho	Zambia
Kingdom of Swaziland	Zimbabwe

## Framework

The framework outlines a conceptual pathway leading from the Declaration (call to action) through the goals and strategies which represent the basis of the Strategy or plan of action, towards the realisation of the Mission and Vision. Figure 1, at the end of this section, presents a diagrammatic representation of the interconnectedness of the various components of the framework.

## Mission

Access to quality and affordable services for the prevention and care of diabetes

## Vision

The Diabetes Declaration and Strategy envisage a future for diabetes in Africa in which:

- Diabetes and the associated risk of related non-communicable diseases are widely recognised as a health priority among African nations and resources are allocated accordingly
- Politicians, funders, planners and providers of health care along with all government sectors, industry, business, non-government organisations, professional associations and patient organisations unite and co-ordinate to prevent diabetes
- The capacity of African health systems is equal to the task of treating and managing diabetes to prevent complications and achieve optimal health and wellbeing for people with diabetes
- All primary care workers are knowledgeable and skilled to provide a basic level of health care, advice and self management education to people with chronic diseases such as diabetes as well as people with infections diseases such as HIV/AIDS
- Systems are in place to monitor and feedback information on diabetes prevalence, complications and cost and these systems are used to continually improve the efficiency and effectiveness of health systems in preventing and managing diabetes
- All people with diabetes have the opportunity to access high quality and affordable services, medications, and supplies to optimise the outcomes of their diabetes
- No one is discriminated against because of diabetes

## Goals

These goals represent the broad priorities identified by diabetes experts and opinion leaders from sub-Saharan Africa. The most pressing priorities are to alleviate the suffering and unnecessary early death of people with known diabetes, find and treat those who have diabetes but do not yet know it and to prevent new cases of diabetes (Goals 1 and 2). However, it is well recognised among the diabetes professional community that such attempts cannot be truly effective without addressing the systems needed to underpin such efforts. These are outlined in Goals 3 and 4.

### Primary Goals

1. Prevent diabetes and related non-communicable diseases
2. Improve quality of life and reduce morbidity and premature mortality from diabetes

### Supporting Goals

3. Build the capacity of health systems to provide fair and equal access to high quality diabetes prevention, care, education and support services and supplies
4. Conduct relevant research to continually improve our knowledge and ability to prevent, delay, and manage diabetes to reduce its impact and assess the impact of care

## Key strategies

Some broad strategies, which will be critical to achievement of the goals of the Diabetes Strategy for Africa are:

- **Advocacy**  
Form partnerships to build a strong and united voice to raise awareness of the threat of diabetes and communicate the urgent need to act to reduce this threat, highlighting always that:
  - the threat of diabetes is such that it is less costly to act than not to act
  - any investment in diabetes is an investment in preventing and treating a

cluster of chronic conditions e.g. hypertension, heart disease, stroke, obesity, and certain cancers.

- **Empowerment of individuals families and communities**

Ensure that all individual and community education about diabetes conveys the message that:

- diabetes is serious
- diabetes can be prevented and/or treated and controlled
- “you” can do something about it.

- **Prioritisation**

To make the best use (highest impact) of scarce resources, engage all stakeholders in assessing the needs versus available resources, and in setting regional, national and local priorities for what needs to be done, in what order, and to what extent.

- **Mobilisation of resources**

Look for innovative ways of funding what needs to be done. Not all funding for diabetes has to be labelled “for diabetes”. Think creatively to ensure that diabetes is addressed as part a wide range of initiatives using:

- the whole platform of government owned health and social policy and activities
- related disease areas as an entry point for addressing diabetes
- the full spectrum of government and non-government sectors.

- **Capacity building**

Capacity building is about making what you have work better. This can be done through a paradigm shift which encourages the health system, whether regional, national or local, to look at what needs to be done and accordingly re-align its:

- workforce and health services
- governance i.e. accountability and consistency through policy, protocols, standards
- strategic planning and prioritisation.

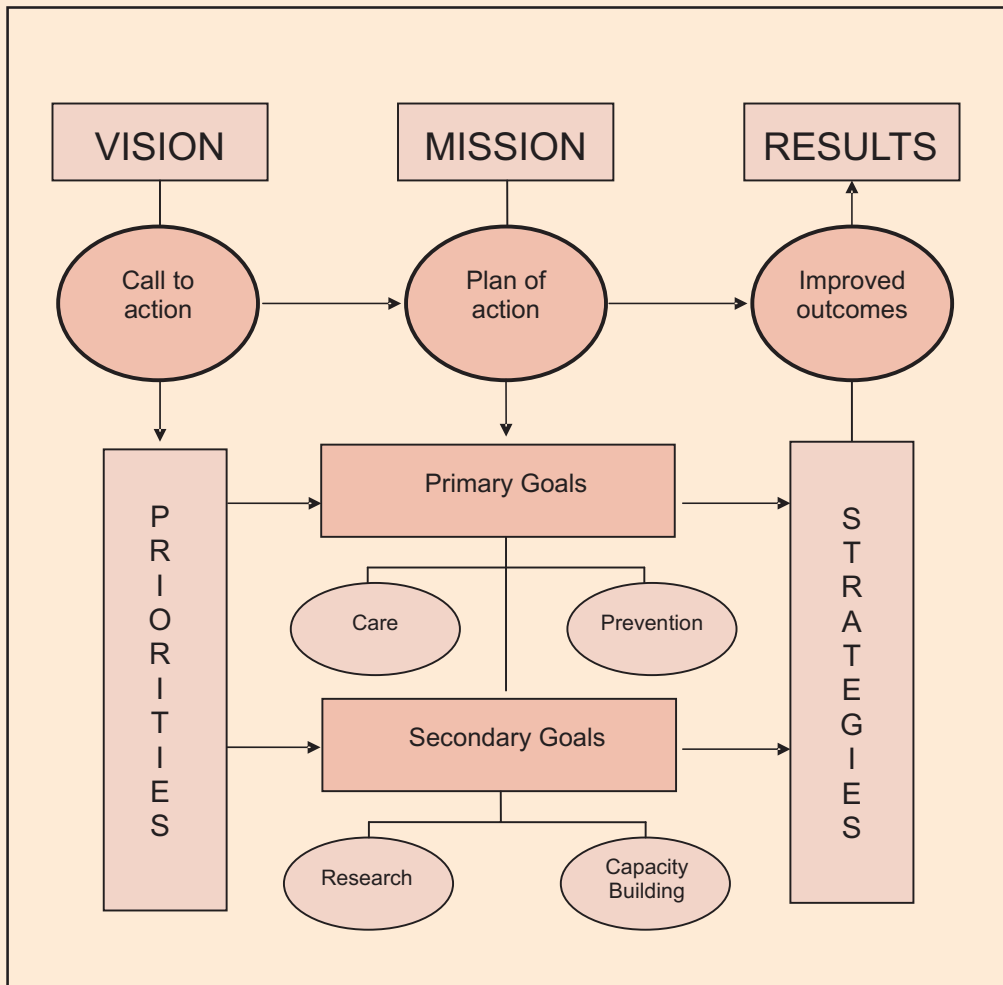
- **Make diabetes “everybody’s business”**

Directly or indirectly, everyone is affected by diabetes i.e. individuals, families, communities, schools, churches, health professionals, and politicians from all government sectors, non-government organisations, business and industry. Use the Diabetes Declaration and Strategy to spread the message that “diabetes is everybody’s business”. Use all facets of the health system e.g. village health workers, HIV/AIDS workers to include diabetes and its prevention as a

component of the care they provide.

Figure 1 attempts to illustrate the interface between the Declaration and Strategy. It is designed to show how the Vision and Mission can inform the identification of

**Figure 1: The Framework**





# Part 1: Background and Context

## About diabetes mellitus

Diabetes mellitus is primarily a disease of carbohydrate metabolism in which the individual cannot properly utilise the sugars and starches in food. This leads to a build up of “sugars” (glucose) in the blood which, if not diagnosed or not properly treated and controlled, can lead to devastating, irreversible complications such as:

- blindness
- kidney failure
- heart attack
- stroke
- amputation
- erectile dysfunction
- neuropathy
- nerve damage

While these microvascular, macrovascular and neuropathic complications are predominantly due to persistent hyperglycaemia (prolonged high levels of glucose in the blood), hypertension, lipid disturbances and obesity are important contributing factors. Because of this, and the shared lifestyle factors between Type 2 diabetes and many other chronic conditions, diabetes is sometimes cited as the “composite” chronic disease (Figure 3). Poorly controlled diabetes can affect every system in the body and, across the course of their disease, people with diabetes may need to access a wide spectrum of health services eg for heart, kidneys, eyes, feet and other health problems. However, it is important to note that judicious use of these services to support primary care workers can assist in avoiding costly endstage complications. It is also vital to grasp that much of the treatment of diabetes can be carried out in tandem with that of other related chronic diseases, thus adding value and optimising the effectiveness of the health care dollar.

Diabetes also carries a burden of short-term complications. These are always acute and may be life threatening, and therefore always require urgent medical attention and care. They usually occur as a result of delayed diagnosis, inadequate or inappropriate treatment, error in or poor self-management, lack of self care education or access to professional assistance, and intercurrent or concurrent illness or infection and include:

- ketoacidosis
- hypoglycaemia
- hyperosmolar coma
- infections e.g. pneumonia, tuberculosis

There are three main types of diabetes - Type 1 diabetes, Type 2 diabetes and gestational diabetes (GDM):

- **Type 1 diabetes**

Type 1 diabetes, formerly known as insulin dependent or juvenile onset diabetes, is an autoimmune disease in which the body's immune system reacts against and destroys the insulin-producing beta cells in the islets of the pancreas. People with Type 1 diabetes lose their ability to produce endogenous insulin and will certainly die if deprived of injectable insulin. Further, poorly controlled pre-existing Type 1 diabetes in women of childbearing age can lead to birth deformities and defects in the baby and severe complications of pregnancy in the mother. Although Type 1 diabetes is one of the most common chronic conditions of childhood, it can occur at any age. Despite the lower proportion of people with Type 1 diabetes compared to the larger numbers of people with Type 2 diabetes, Type 1 diabetes carries a burden of both short and long term complications and early mortality which make its inclusion in population focussed approaches to improving diabetes outcomes essential.

It is currently not possible to cure or prevent Type 1 diabetes. Unlike Type 2 diabetes there are no readily identifiable, modifiable risk factors that can be easily assessed. Nonetheless, the current state of knowledge about the primary mechanisms for the development of Type 1 diabetes and recent research into the identification of early markers and immune therapy to prevent its clinical manifestation, point to an increasingly high probability of preventing Type 1 diabetes in the future.

- **Type 2 diabetes**

Type 2 diabetes, formerly known as non-insulin dependent or mature onset diabetes is characterised by insulin resistance and relative insulin deficiency. It has a genetic component and lifestyle factors such as overweight, physical inactivity and inappropriate nutrition can trigger its development. Globally, it is the commonest form of diabetes, affecting 85-95% of all diabetes in developed countries, with a higher percentage in developing countries (IDF, 2003). Type 2 diabetes occurs predominantly in mature adults with the prevalence increasing markedly in older age groups. However, in some societies, particularly where overweight and obesity are prevalent, Type 2 diabetes is increasingly occurring in young adults and even in children.

While the prevalence of diabetes varies among different populations, Type 2 diabetes is one of the most common chronic diseases in the world and is increasing at an alarming rate, especially in developing countries. People with Type 2 diabetes are at high risk of macrovascular disease, having a two to four fold increase in cardiovascular disease compared with the non-diabetic population. They are also prone to the full range of microvascular complications.

- **Gestational diabetes**

Gestational diabetes is carbohydrate intolerance of variable severity which is first diagnosed during pregnancy. It is frequently cited as the commonest complication of pregnancy. Untreated or poorly controlled gestational diabetes can result in increased perinatal mortality and maternal complications at birth. While the diabetes in the mother usually “goes away” after the birth, gestational diabetes is an independent risk factor for Type 2 diabetes in later life. Further, infants of a gestational diabetes pregnancy carry a higher risk of obesity and diabetes in adult life.

## Extent of the burden

- **The personal burden of diabetes**

The management of diabetes for the individual and his or her family involves significant social and lifestyle adjustments. These may include self-measurement of blood glucose, taking insulin or oral medications, balancing diet and physical activity, and avoidance of acute life threatening short-term complications such as hypoglycemia and ketoacidosis. Gender roles for both men and women can be negatively affected e.g. as the family provider or caregiver. Due to the uncertainty or absolute lack of insulin supplies, a diagnosis of Type 1 diabetes in Africa can be a sentence to death. Beran et al (2005) found life expectancy in rural Mozambique to be as low as 7 months and earlier studies show horrifyingly high mortality rates in children with Type 1 diabetes in other parts of Africa. For example Sidibe et al (1999) found a 50% mortality rate in an eight year follow up of children diagnosed with Type 1 diabetes in Mali and anecdotal evidence cited at the IDF-Africa and WHO-AFRO Nairobi 2006 National Diabetes Programmes Workshops suggests that by 2004, all of the children in this cohort had died.

Even if death is avoided, in developing countries a diagnosis of diabetes can be a sentence to a lifetime of poverty. Even in countries where there is universal health insurance, diabetes imposes an additional financial burden but in many developing countries a diagnosis of diabetes may mean financial ruin and the denial of access to education, and even fundamentals such as food, for the whole family.

Other detrimental effects of diabetes on individual or family quality are well documented e.g.

- lack of access to information, services, medications, self care supplies
- inflexible self care requirements such as having to self inject insulin
- having to eat at regular intervals, and lack of access to appropriate food
- stigmatism and discrimination e.g. loss of marriage opportunities and loss of employment

- the physical and psychological trauma of complications such as blindness and amputation (for which many developing countries have no rehabilitation services)
- the ever-present fear of complications

Not surprisingly, people with diabetes suffer a greater burden of anxiety and psychological problems (Lustman et al, 2000; Anderson et al, 2001; Eaton, 2002; Kruse et al, 2003; Peyrot et al, 2006) and impaired quality of life - especially in the presence of complications (Holmes et al, 2000; Colagiuri S et al, 2003).

- **The public health burden**

The morbidity and early mortality associated with diabetes has enormous implications for productivity. Worldwide, in 1995, there were an estimated 135 million people with diabetes. The IDF estimates that there were 189 million people with diabetes in 2003 and predicts an increase to 324 million in 2025 (IDF, 2003). Similarly, the WHO is forecasting an increase from 171 million people with diabetes worldwide in the year 2000 to 366 million in 2030 (Wild et al, 2004). Most of this increase is anticipated to occur in developing countries with an expected increase of 170%, from 84 to 228 million people. This means that by the year 2025, 75% of all people with diabetes will be from developing countries (King et al, 1998) and Amos et al (1997) predicted that the greater proportion of the expected increase in diabetes will occur in developing countries, specifically Asia and Africa.

Particularly in developing countries, the expected majority of the increase in numbers of people with diabetes will be predominantly in the 45-64 year age group with age at diagnosis increasingly becoming younger. This is of particular economic importance, as these people will be affected in the most productive period of their lives. In addition they will potentially have more time to develop complications from the disease. This will further add to the health care demand, resource utilisation and cost (King et al, 1998).

According to the IDF (2003) the African region had an estimated diabetes prevalence for adults 20 -79 years of 2.4% (7.1 million persons) in 2003, which is expected to increase to 2.8% by 2025 (15 million persons). The prevalence of impaired glucose tolerance (IGT) is estimated at 7.3% for both 2003 and 2025. While the prevalence remains unchanged, due to population growth this will represent an increase in the number of people with IGT from 21.4 million in 2003 to 39.4 million in 2025. The estimated prevalence of Type 1 diabetes in 2003 was 0.01% (35.1 thousand persons) for children 0-14 years. The number of children who die of type I diabetes without being diagnosed is unknown.

- **The financial burden**

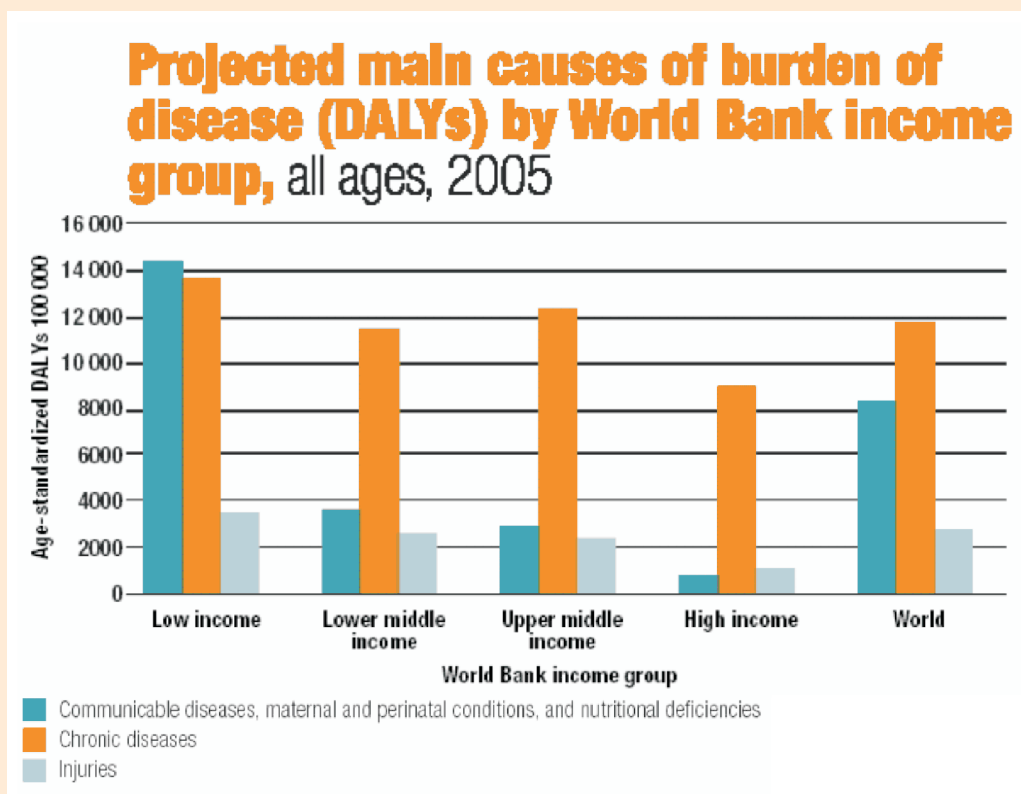
There is little information available on the costs of diabetes care in sub-Saharan Africa. However, there is evidence that complications resulting from late diagnosis and late presentation, lack of access to essential medications and services, and poor management of diabetes are common and combine to create a heavy socio-economic burden for Africa. Further, the early age of onset leads to a greater opportunity for developing complications, and as a consequence greater financial costs. Direct costs such as medical care and treatment of diabetes are usually met by the patient, family and health sector (Mbanya et al, 2003). A study by Chale et al (1992) estimated that for Tanzania for the year 1989-90, the cost for caring for all patients with diabetes would have been \$ 138 per patient per year. This was way above the allocated per capita health expenditure of \$ 2 per person for that same year. In 1997, Chale and McLarty suggest that treating diabetes complications was the second highest outpatient cost for Tanzania at \$ 839, 392 – equivalent to 30% of total cost. The same authors cite the direct cost of treating Type 1 diabetes at \$ 229 per patient per year with insulin accounting for the major proportion of this cost.

Long-term complications account for most of the financial cost of diabetes and people with Type 1 diabetes or Type 2 diabetes are equally susceptible to developing complications. Cost of illness studies, for example from Europe (T2ARDIS, 2002) and Australia (Colagiuri S et al, 2003), report that by far the greatest proportion of diabetes costs are directly attributable to complications, especially when microvascular and macrovascular complications co-exist. As indicated by Osei et al (2003), if left unchecked, the increasing rates of diabetes prevalence and incidence and associated long term complications are likely to take a devastating human and financial toll in Africa.

The impact of diabetes on the productive age group of the population has already been noted. Despite the lack of costing data for sub-Saharan Africa it is clear that the potential damage from diabetes to national economies is huge, not only in terms of its direct effects but also because of the magnitude of its indirect burden as a major underlying cause of heart disease. For example, Leeder et al (2004) estimate that between 2000-2030 cardiovascular disease will account for 41% of deaths among 35-64 year olds in South Africa alone.

There is no doubt that the burden of infectious diseases in Africa and globally fully justifies the level of funding it attracts. However, given the disproportionately high contribution of the classic chronic diseases to global mortality (Figure 2) and morbidity, it is imperative that diabetes, cardiovascular and respiratory diseases and cancer are allocated funding that is more aligned with the magnitude of their impact

as a matter of urgency. As Yach et al (2004) point out, the imbalance of infectious versus chronic disease funding must be addressed if impediments to the prevention and control of chronic diseases are to be removed.



## The response to date - diabetes declarations and action plans

The threat of diabetes is well recognised by major international health agencies such as the WHO and the IDF and these two organisations have formed partnerships around the world to lead and guide action to reduce its impact. These partnerships flag four important points:

1. The size and seriousness of the public health and economic threat of diabetes
2. That diabetes is amenable to prevention and control interventions
3. A partnership approach is essential - diabetes is too big and too complex to be addressed effectively in isolation
4. The requirement for preventative measures versus care of those already diagnosed can be appropriately balanced.

The African Diabetes Declaration makes Africa the fourth major geographical entity worldwide to unite its countries in a call to action to combat diabetes. This follows the 1989 World Health Assembly call for all countries to develop national diabetes plans which resulted in partnerships between the IDF and WHO to jointly develop and implement plans to combat diabetes under the following initiatives:

- European St Vincent declaration (1989)
- Declaration of the Americas (1996)
- The Western Pacific Diabetes Declaration and Plan of Action (2000)

The African Diabetes Declaration and Strategy were initiated by IDF-Africa in 2003 in response to the pressing need to attract attention to the massive and increasing personal and public health toll of diabetes on the African nations and its threat to their future economic health. Since that time extensive consultation on the Declaration and Strategy have been conducted by IDF-Africa with representatives of the various sub-Saharan countries and with its partners and with external experts and agencies. The consultation to develop the declaration and Strategy has included:

- IDF-Africa Regional Council Meeting in Zanzibar, 2003
- IDF-Africa Regional Council Meeting in Paris, 2003
- Consensus meeting in Ngorongoro Tanzania – February, 2004
- Consensus meeting in Dakar, Senegal – April, 2004

- Consensus meeting in Nairobi, Kenya – July, 2004
- Workshop on National Diabetes Programmes in Nairobi, Kenya – March, 2006
- Workshop on National Diabetes Programmes in Bamako, Mali – June 2006
- IDF-Africa Regional Council Meeting in Dar Es Salaam, 2006

## About Africa

### Profile of the region

- **Demographics and health**

This document focuses on sub-Saharan Africa which comprises East Africa, West Africa, Central Africa and Southern Africa. The estimated population of sub-Saharan Africa was 660 million in 2000, with an annual population growth of 2.4% and a fertility rate of 5.2 births per female (UN Africa Recovery, 2003). The World Bank (2003) estimated that in 1997, 45% of the population was in the 0-14 age group, 52% was in the 15-64 age group and 3% was over 65 years of age. For the year 2000, health indicators of the region show a mortality rate of 161.6 deaths per 1,000 live births in under 5 year olds, and a life expectancy at birth of 49 years. In 1997 57% percent of people had access to safe drinking water, 53% to sanitation, and 52.8% of children were immunised against measles. For the same year, there was a net primary school enrollment of 60%, and 30% adult males and 47% adult females were illiterate (UN Africa Recovery, 2003)

Many countries in the region have unacceptably high levels of infectious diseases. This is exacerbated by an increasing burden of non-communicable disease such as diabetes, asthma, cancer and cardiovascular disease, which grows in direct correlation to industrialisation and urbanisation. For example, since World War II, as a consequence of accelerating industrialisation and globalisation, there has been a shift in disease patterns from infectious to chronic conditions. As assessed by overall contribution to disease burden, Type 2 diabetes, cardiovascular diseases, obesity, and hypertension have overtaken infectious diseases in many developing countries. The extent of this global burden is well documented e.g. WHO (1999) estimated that in 1998 alone almost 60% of deaths globally were attributable to non-communicable diseases with this figure expected to increase to 73% of annual deaths by 2025.

- **The socio-political context**

The countries of sub-Saharan Africa are in varying stages of development. Thirty three of the 49 least developed countries, as defined by the United Nations Economic

and Social Council are in sub-Saharan Africa (IDE, 2003). In 2001 there were an estimated 313 million people in sub-Saharan Africa living on less than \$ 1 per day (The Millennium Village Project, 2006).

Conversely some countries are resource rich with precious natural resources. However, these resources do little to help the poor as they are often exploited by the rich and powerful and are sometimes the cause for conflict within and between countries. Growing poverty, increased population growth, limited development opportunities, ethnic tensions, HIV/AIDS and conflicts (ICRC, 2002) are commonplace. There are large variations in political and health care systems, ethnic composition, economic models and resources between the countries in the region. In many countries low literacy and poverty impact heavily on the potential of the individual to understand and self manage their diabetes. Health insurance is rare and for many individuals and families the cost of insulin, oral anti-diabetic medications and other supplies for diabetes management is prohibitive (IDE, 2003). Thus for those living in poverty, and facing social and educational disadvantage, the management of diabetes may be a low priority.

## What is different about diabetes in Africa?

- **Transition**

There have been three major stages of change in human history. They are the change:

- from hunter-gatherer to agriculture based societies
- from agriculture based to industrialised societies
- from industrialisation to globalisation

Unlike most parts of the world which have moved sequentially through these stages, Africa is experiencing all three of these socio-economic phenomena simultaneously. The social upheaval associated with these changes, along with the horrendous existing burden of infectious diseases sets a uniquely difficult and complex socio-economic and political backdrop that both complicates and is complicated by the rapid emergence of diabetes, cardiovascular disease, and related chronic diseases, as a major threat to health and ultimately to evolving economies.

- **Double burden of chronic and infectious diseases**

Sub-Saharan Africa is suffering the double impact of communicable diseases and non-communicable diseases. Communicable diseases currently predominate in many countries (Murray and Lopez, 1997). The HIV/AIDS epidemic, the resurgence of tuberculosis and other diseases such as malaria and childhood

infectious diseases have resulted in a high health deficit for many sub-Saharan African countries (Mbanya et al, 2003). Although there is limited available evidence



## Part 2: The Case for Intervening

## The argument and the evidence for intervening

1. Diabetes is costly, chronic, incurable and increasing
2. There are clearly identifiable points along the continuum of care from pre diabetes to palliation at which it is possible to intervene to delay or halt the progression of the diabetes continuum
3. There are safe and effective treatments available which do not require huge expenditure or ultra complex technological interventions
4. There is irrefutable evidence that certain clinical treatments and self care processes significantly improve health outcomes for people with diabetes
5. No matter how resource poor a health system may be, everyone can do something to address the diabetes problem
6. The cost of intervening will be far less than the cost of not intervening

There is a not infrequently expressed view that chronic diseases in Africa are negligible in the face of HIV/AIDS. Levitt and Bradshaw (2006) challenge the misconceptions that the adult population in sub-Saharan Africa will be so ravaged by HIV/AIDS that few will live long enough to get diabetes. They calculate that despite the toll of HIV/AIDS and partly because of wider treatment with antiretroviral therapy, the number of people with diabetes will increase exponentially. These authors advocate the adoption of preventative strategies as well as improving the quality and accessibility of care for those already diagnosed with diabetes.

There are many compelling reasons for intervening to prevent and treat diabetes.

- **Humanitarian**

People with diabetes suffer physically, psychologically and socially. Many people with Type 1 diabetes in Africa die for lack of insulin. Others suffer severe complications which restrict their ability to work and earn, thus disadvantaging their families, sometimes to the extent of condemning the family to a life of poverty and social and educational disadvantage. Even without poverty, a diagnosis of diabetes brings a lifelong “sentence” of fear and suffering. The threat of complications such as blindness, amputation and kidney failure are ever present and many people are discriminated against in the workplace and socially, for example in marriage opportunities.

There is a mounting body of evidence in the peer reviewed medical literature which confirms the psychological suffering of people with diabetes and illustrates the added burden of anxiety and depression and negative impact on wellbeing and quality of life caused by diabetes (Lustman et al, 2000; Holmes et al, 2000; Anderson et al, 2001; Eaton, 2002; Kruse et al, 2003; Colagiuri S et al, 2003; Peyrot et al, 2006).

- **Socio-economic**

There is an urgent need to act to prevent an explosion of the epidemic of diabetes in Africa. By 2025 the number of people with diabetes in the African region is expected to reach 15 million (IDE, 2003) and according to Motala et al, (2002), the moderate to high prevalence of impaired glucose intolerance in populations which currently have a low diabetes prevalence may indicate an impending diabetes epidemic. This would place additional strain on countries already burdened by infectious diseases such as malaria, HIV/AIDS and tuberculosis.

The need to not only prevent diabetes but to also diagnose and treat those who have it but are not yet aware they have diabetes is also imperative. In an industrialised setting Dunstan et al (2002) showed that for each person with diagnosed diabetes there is another with undiagnosed diabetes. In the Pacific Islands this has been demonstrated to reach 5 undiagnosed cases for every diagnosed case (Colagiuri S et al, 2002) and African studies show rates of undiagnosed diabetes of 60% in Cameroon (Mbanya et al, 1997), 70% in Ghana (Amoah et al, 2002) and over 80% in Tanzania (Aspray et al, 2000). This means that many individuals are not diagnosed until irreversible, and often incapacitating, complications drive them to seek medical care.

The need to act to avoid the potentially disastrous impact of diabetes on the developing economies of sub-Saharan Africa is paramount. Most people predicted to be affected by diabetes in sub-Saharan Africa will be in the 20-44 year age group (King, 1998). This has two major consequences. Firstly, developing diabetes earlier in life means more time to develop diabetes complications. Secondly, these changing patterns of morbidity resulting from diabetes, are changing patterns of dependency and undermining the health of the workforce and therefore reducing national productivity. Diabetes complications such as kidney failure, coronary heart disease, blindness, diabetic foot and coma are high (WHO-AFRO, 2001) and place a huge economic burden on health systems that are already stretched. The morbidity and premature mortality associated with diabetes complications results in a loss of human resources (Mbanya, 2003) which impacts negatively on the economic viability of developing nations. Preventing and controlling diabetes is an investment in the economic health of any country and/or region.

In mounting the economic argument for intervening to prevent diabetes and its complications, it is important to note that the cost of intervening will be less than the cost of not intervening. This principle is applicable even on a micro-economic level. For example, a study from Cameroon found diabetic foot problems were the second most common cause of hospital admission for diabetes and the main cause of prolonged hospital stay and bed occupancy (Kengne et al, 2006). The same study found secondary foot problems were an associated cause of death in 19.3% of the study cohort yet diabetes related foot ulceration and amputation are potentially

avoidable at very low cost. Another study of diabetic retinopathy in West Africa found that cataracts (which are commonly twice as prevalent in people with diabetes) were responsible for more visual impairment than retinopathy (Rotimi et al, 2003). Again cataract extraction is low cost, minimally disruptive in terms of hospital length of stay and time off work; relatively safe; capable of reliably restoring vision; and is a far more humane and economically viable option than the impact of low vision and blindness on dependency and productivity. Also specific to Africa, Motala et al (2006) point out that cost effectiveness of interventions to reduce diabetes complications “compares favourably with other accepted uses of health care interventions and provides a convincing rationale for improving standards of care for people with Type 2 diabetes”.

At a macro-economic level, Leeder et al (2004) quantify the potential astronomical cost of cardiovascular disease – largely a consequence of diabetes – in developing countries and the effect this will have on the workforce and dependency. WHO (2005) points out that chronic diseases are an under-appreciated cause of poverty and hinder the economic development of many countries but an additional 2% reduction in chronic disease rates over the next 10 years would save 36 million deaths by 2025.

Saving these deaths would result in an accumulated growth of \$ 36 billion for China, \$ 15 billion for India and \$ 20 billion for the Russian Federation. There is no reason to doubt that similar benefits could accrue to Africa. The same report also reminds us that, in developing countries, most of the necessary medications are no longer restricted by patents and can be produced for less than \$ 1 or so per month and that the solutions to chronic diseases are effective and are very cost-effective for all regions of the world including sub-Saharan Africa (WHO, 2005).

- **Diabetes and its complications can be prevented**

There is undeniable evidence that the onset of Type 2 diabetes can be prevented or significantly delayed and that early diagnosis and appropriate management of diabetes minimises the risk and long term complications and delays the progression of established complications.

### **Primary prevention**

Individuals at higher risk of developing Type 2 diabetes are those with impaired glucose tolerance, obesity, insulin resistance, dyslipidaemia, hypertension, familial diabetes and gestational diabetes (Hjelm et al, 2003). Many of these risk factors associated with the development of Type 2 diabetes are modifiable (Motala, 2002).

Primary prevention activities aimed at increasing physical activity, reducing obesity and improving diet, have been shown to prevent or delay the onset of Type 2 diabetes

in people at high risk of diabetes (Pan et al, 1997). Two subsequent studies Tuomilehto et al (2001) and the American Diabetes Prevention Program (Knowler et al, 2002) both demonstrated a 58% reduction in diabetes as a result of lifestyle intervention. Knowler and colleagues also showed a 30% reduction in diabetes with the use of metformin in people with IGT. Subsequent studies of oral medications have shown similar reductions of preventing progression to diabetes.

## Secondary prevention

There is now a wealth of evidence from the international literature that conclusively demonstrates that diabetes complications can be prevented or significantly minimised with early detection and access to appropriate medical treatment and care e.g.

- essential medications for diabetes, blood pressure and lipid control
- good glycaemic, blood pressure and lipid control
- regular screening for complications
- self care education.

Two major landmark studies have demonstrated the effectiveness of good glycaemic and metabolic control in preventing and reducing microvascular complications in both Type 1 diabetes (DCCT, 1993) and Type 2 diabetes (UKPDS 33, 1998). The key characteristics of these studies were regular monitoring and intensive management of diabetes.

A number of other secondary/tertiary prevention studies have shown the benefit of risk factor reduction in people with diabetes who have had a macrovascular event. For example, the results of the Heart Outcome Prevention Evaluation (HOPE) Study suggest a benefit of ACE inhibitors in the prevention of cardiovascular events in people with Type 2 diabetes, even in the absence of hypertension (HOPE Study, 2000). Other studies have shown reductions in amputation (Edmonds et al, 1986; Larsson et al, 1995; Carrington et al, 1996), stroke (Berthet et al, 2003) and blindness (Backlund et al, 1997). Brenner et al (2001) and Parving et al (2001) have demonstrated significant benefits from pharmacological interventions in renal disease for people with Type 2 diabetes. Multifactorial intervention with improvement in glycaemic, blood pressure and lipid control in people with Type 2 diabetes significantly lowers risk of cardiovascular disease, nephropathy, retinopathy, and autonomic neuropathy (Gaede et al, 2003).

However, medications in sub-Saharan Africa are often unavailable or irregularly available and unaffordable (Motala, 2002), and blood glucose monitoring by HbA1c is not accessible to most people with diabetes (Whiting et al, 2003). Further, “the current availability and use of methods for monitoring blood glucose control means that very few people with diabetes in Africa are likely to achieve normal levels of

glycosylated haemoglobin” (Whiting et al, 2003). All responding African countries to The Global Access to Insulin and Diabetes Supplies Survey, 2003 indicated that the high cost of supplies was the major reason for not practising self-monitoring. This was followed by lack of testing supplies and lack of diabetes education (IDF, 2003).

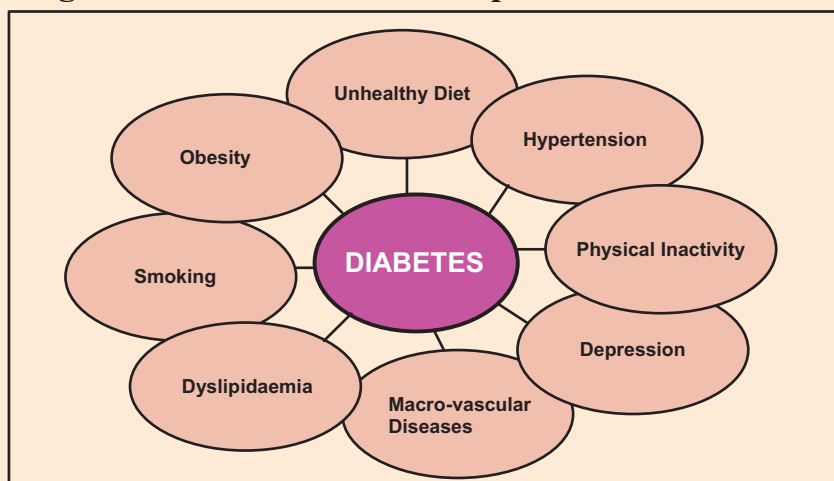
The investment required to address this is relatively small compared to the socio-economic costs of not intervening. It is clear from the available evidence that any investment in reversing this situation will bring enormous benefits to the health of individuals and to the physical and economic health of the countries of sub-Saharan Africa.

- **Investing in diabetes yields benefits in other chronic disease areas**

Diabetes is the composite chronic disease – it shares common risk factors with many non-communicable diseases. Figure 3 indicates, diabetes is not only a disease entity in its own right with microvascular disease repercussions but also underpins heart diseases and stroke. Diabetes is intimately linked with hypertension, lipid disorders, and obesity. Unhealthy diets, physical inactivity and other so-called lifestyle issues are all strongly implicated in all of the disorders listed above. Mental health problems such as depression and anxiety are increasingly being linked to diabetes. Colagiuri R et al (2004) argues that, for these and other reasons, diabetes makes an ideal model and ‘selling point’ to advocate for a truly integrated approach to chronic disease prevention.

The strongest links between the conditions shown in Figure 3 are inappropriate diet, physical activity and smoking. These three risk factors are largely responsible for the four chronic diseases – diabetes, cardiovascular and respiratory diseases and cancer - which account for 50% of the world’s mortality (Oxford Health Alliance, 2006) and

**Figure 3: Diabetes – The composite chronic disease**



make an excellent focus of preventative activities.

Governments and health authorities are often reluctant to invest in a single disease, as they fear the potential for high costs with small gains in a small focus area. However, as Figure 3 illustrates, a focus on diabetes automatically directs attention to diet, exercise, heart disease, and many other areas spreading the risk of investing while at the same time, increasing the chance of a high return. In other words, any investment in diabetes will also yield results in these areas. Additionally, any investment in creating a healthier environment will not only produce gains in reducing and preventing the development of risk factors for metabolic diseases in the general population but will also act to support the establishment and maintenance of health behaviours which reduce the risk of developing complications in people with established diabetes (Colagiuri R et al, 2006)

The bottom line is that it will be less costly to intervene in diabetes now than to wait for the epidemic to reach its peak. There are low cost interventions with proven effectiveness that can reduce the impact of diabetes while simultaneously addressing risks for other disease areas.



## Part 3: The Task

## What needs to be done?

The challenge is to limit the toll of diabetes, hypertension, obesity and cardiovascular diseases through preventative community interventions, risk reduction in high-risk groups, and effective care systems for the diagnosed. A key strategy for achieving this lies in refocusing health systems to cope with the more complex and longer term demands of chronic disease prevention and management such as:

- **Preventing Type 2 diabetes**

It is not yet feasible or possible to predict and prevent Type 1 diabetes on a broad scale. However, Type 2 diabetes has distinct and easily recognisable risk factors, many of which are modifiable through lifestyle interventions. As the transition from traditional hunter-gatherer and agriculture-based economies to industrialisation escalates, the accompanying changes in physical activity and nutrition make people more susceptible to Type 2 diabetes. The prevention of Type 2 diabetes can be approached in two main ways:

1. *The “high risk” approach*

This approach is more clinically oriented and seeks to identify individuals at high risk of diabetes and work with them to reduce those risks in order to decrease the chance of diabetes developing. This is done through lifestyle interventions aimed at increasing physical activity and improving nutrition to increase dietary fibre and reduce the use of animal fats, and other high calorie substances such as alcohol.

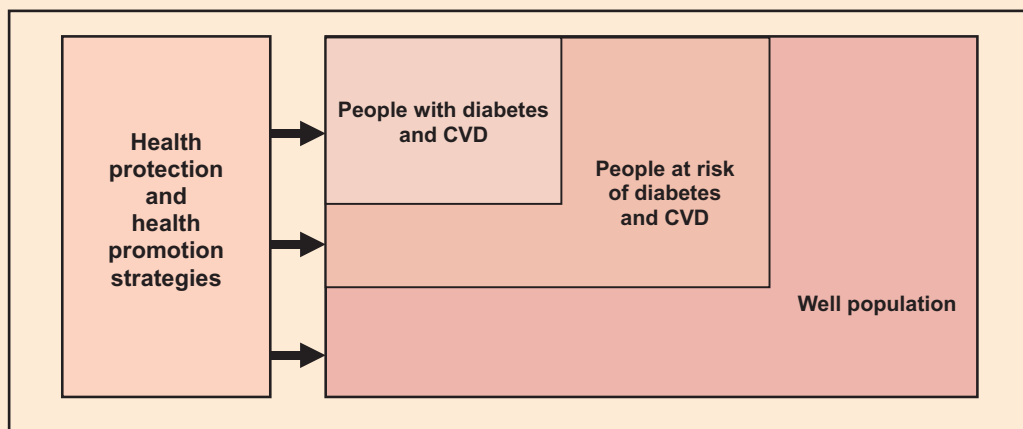
2. *The population approach*

This approach seeks to protect and promote health and reduce the development of the so-called lifestyle diseases such as Type 2 diabetes, cardiovascular and nutrition related diseases, by creating environments where healthy lifestyle options are almost unavoidable. In addition to Ministries of Health, this requires the co-operation of a range of sectors within government to promote health through public social policy and food legislation, and the engagement of industry, communities and workplaces in creating and sustaining antidiabetogenic environments.

There is also a third way – combining a population and high risk approach. Figure 4 shows the whole population divided into three categories – those with diabetes, those with identifiable diabetes risk factors and those with no diabetes risk factors. As suggested by Colagiuri R et al (2006) health promotion and prevention strategies directed at the whole population, or a combined population – high risk approach, can bring benefits to all three population categories and can reduce risks for other diseases.

Tobacco control is an excellent example where individual counselling and treatment in high risk individuals can be supported by regulatory and fiscal policies directed at the whole population to prevent risks from developing in the well population, reduce risk in those already at-risk, and prevent or reduce the risk of complications in people with overt diabetes, heart or respiratory disease.

**Figure 4: Population strategies bring broader benefits**



- **Early diagnosis and appropriate management of diabetes**

With appropriate training and relatively simple equipment secondary prevention services can be provided by health workers at all levels and should focus on:

**1. Early diagnosis of Type 2 diabetes**

Type 2 diabetes has a long pre-clinical phase and many people who have it remain asymptomatic and only present for diagnosis well after complications are already established. This can be avoided by earlier diagnosis as there are several easily identifiable indicators for undiagnosed diabetes including:

- Overweight
- Family history of diabetes
- Hypertension
- Women with a history of gestational diabetes
- Increasing age

While an equivocal diagnosis of diabetes may require laboratory confirmation, any health worker can identify risk factors for undiagnosed diabetes and refer to a health professional that is qualified to make the diagnosis.

**2. Assessment and management of glycaemic and metabolic status**

This requires initial physical and laboratory assessment of glycaemic and metabolic control, the initiation of insulin therapy in people with Type 1 diabetes and oral antidiabetic agents as indicated in people with Type 2 diabetes. It should be noted that many people with Type 2 diabetes will ultimately require insulin to achieve “safe” glycaemic control and that both people with Type 1 diabetes and Type 2 diabetes will require detailed dietary advice and self care education tailored specifically to their type of diabetes and their personal circumstances.

To provide this level of care effectively requires a multidisciplinary approach comprising medical, nursing, and dietetic and podiatry staff who have specific training in diabetes management and self care education. This level of care can include the initiation of insulin therapy, and in many countries is provided almost exclusively on an outpatient ambulatory care basis thus saving costly in-patient services. Where all members of the multidisciplinary team are not available in the local service configuration alternative models may be implemented.

- **Prevent diabetes complications**

Tertiary prevention refers to the prevention and or management of complications. In diabetes this is not clear cut as all treatment and risk reduction efforts are aimed at delaying or preventing diabetes related complications. Nonetheless, the presence of complications and/or co-morbidities add significantly to the complexity of diabetes management and requires care by health professionals with specialised training and access to the necessary equipment and supplies. Again the focus is on multidisciplinary care and is usually carried out in specialist diabetes centres located in tertiary referral hospitals. Additional support from other tertiary services such as renal dialysis may be required.

- **Build and maintain systems for effective care and prevention**

There are some fundamental requirements for achieving effective, affordable and accessible prevention and care services. These include:

- Developing an appropriately skilled workforce with a balanced mix of generalists and specialists
- Using the platform of the whole health system - integration within and between chronic and infectious diseases
- Making data collection and use part of routine practice
- Applying the appropriate models to the prevailing conditions - minimal, medium and optimal infrastructure
- A strategically planned approach with clear governance, guidelines and standards

## Best practice framework

The best framework shown in Table 1 summarises the key components of what constitutes best practice in health interventions. The (Australian) National Diabetes Strategy and Implementation Plan (Colagiuri S et al, 1998) espoused a rationale for intervening to establish priority diabetes programs which was predicated on:

- The magnitude of the problem ie the identified problem
- The likelihood of intervening successfully ie the evidence base for effectiveness

The framework illustrated below extends further to encompass the policy and program environment and considers the implications for and impact on the broader community and social environment. This is useful, from a population health perspective, for mapping, analysing gaps and deficits and providing a benchmark for measuring progress in addressing them.

**Table 1: A best practice framework**

<b>Rationale</b>	There is an identified health problem	There is an evidence base for intervening	Priorities are identified
<b>Infrastructure</b>	The workforce is aware educated and skilled to deal with the problem	Clinical guidelines, protocols referral & monitoring systems are in place to provide good clinical governance	The task is defined, roles are delineated – and integrated across related diseases
<b>Programs</b>	Are optimally effective and efficient	Are equitable & accessible & acceptable by community standards	Are sustainable
<b>Policy</b>	Resources follow the evidence base and the priorities	Social and public health policy supports the evidence base for intervening	Community environments support the maintenance of good health

## What do we have to work with now?

While there is clearly much to be done to gain the political and community awareness and an infrastructure that is equal to the task of turning the tide of diabetes, there are already a number of initiatives in place which can be built on. For example:

- **WHO-AFRO Strategic Plan**

The following summary of the Non Communicable Disease (NCD) Strategy for Africa is quoted from Hayes & Unwin, 2001:

“An NCD strategy for Africa developed by the WHO Regional Office for Africa has recognised the accelerated increase in NCDs, including cardiovascular disease and diabetes, in Africa and has proposed a strategy to enable member states to design and implement NCD prevention and control programmes. The strategy is based around the recognition that many NCDs have common, and often preventable, risk factors. The aim of the strategy is to alleviate the burden of NCDs through the promotion of healthy lifestyles, which will be achieved through:

- supporting integrated disease surveillance
- strengthening health care for people with NCDs
- supporting prevention approaches
- supporting research on effective community-based intervention.

**The strategy identifies priority interventions for the region. These are:**

- assessment of the burden of NCDs, their risk factors and major determinants
- preparation of strategies for prevention and control of NCDs within health development plans
- integration of NCD surveillance within existing surveillance systems
- enhancement of the capacity of health care workers
- development of operational research
- focusing on cost-effective interventions within effective national programmes
- enhancement of partnership with all stakeholders
- development of sustained advocacy for policies to reduce risk factors for NCDs and their complications and to ensure accessible health care for the management of NCDs.”

- **IDF Africa Region Strategic Plan**

The IDF–Africa is one of the seven regions of the IDF globally and is very active in working to combat diabetes in sub-Saharan Africa. IDF Africa Region has made impressive progress towards the four main goals around which its Strategic Plan for 2003-2006 was built. These were:

1. Adopt and implement the African Declaration on diabetes
2. Disseminate diabetes clinical practice guidelines and diabetes education guidelines
3. Disseminate diabetes information through IDF African Region Scientific Journal
4. Training and skilling of health care providers

As of the IDF-Africa Regional meeting in Dar Es Salaam in September 2006, a new Strategic Plan for the period 2007-2010 is being finalised which will focus on implementation of the policies and resources developed under the 2003-2006 Plan. These include:

### **1. The Diabetes Strategy for Africa 2006**

This document outlines primary and secondary goals for the prevention and care of diabetes in sub-Saharan Africa. It presents the case for intervening to avert an epidemic of diabetes and related chronic diseases and outlines a strategy, key focus and implementation areas for putting the plan into action.

### **2. Type 2 Diabetes Clinical Practice Guidelines for Sub-Saharan Africa 2006**

IDF-Africa has designed these guidelines to be implemented within a context of limited local resources. Included within the guidelines are prevention of diabetes and its complications, management of diabetes, acute complications, chronic complications, and special situations such as pregnancy, and living with diabetes. Guidance on the infrastructure/resources needed to run diabetes clinics is also included. The guidelines are published in summarised desk-top form as well as booklet form.

### **3. Diabetes Education Training Manual for Sub-Saharan Africa 2006**

An IDF-Africa Task Force on Diabetes Education worked closely with the Type 2 Guidelines Task Force to complete this comprehensive manual on patient education and care. This resource book is designed to guide and support the training of health care workers and covers a range of issues from the pathophysiology, diagnosis and care of diabetes through to behavioural, psychosocial and cultural issues, and models of care such as team care and the role of the diabetes educator.

Note: These documents are available from the IDF Africa Regional Office and were published by IDF-Africa and the World Diabetes Foundation. Other African and

global organisations and associations which can serve to support and foster diabetes prevention and care activities in Africa include:

- **The Pan African Diabetes Educators Group (PADEG)**

The Pan African Diabetes Educators Group aims to prevent diabetes where possible and to improve life by providing minimum standards of care and knowledge to people with diabetes. Further it represents a united and integrated attempt to reach all levels in society. This regional initiative has developed leadership courses to train diabetes educators to train educators within the primary health care system. Some 1,800 diabetes educators in 26 countries have been trained so far in the region (IDF e-Atlas, 2003).

- **Pan African Diabetes Study Group (PADSG)**

PADSG developed the initial clinical management guidelines for diabetes in Africa in 1996, which laid the groundwork for the new guidelines. In the past, PADSG has also traditionally convened a scientific meeting at regular intervals.

- **The World Diabetes Foundation** ([www.worlddiabetesfoundation.org](http://www.worlddiabetesfoundation.org))

The World Diabetes Foundation (WDF) is a non-government, non-profit organisation dedicated to creating awareness and bringing relief from diabetes to people in the developing world. The WDF already provides practical and financial support aimed at alleviating the burden of diabetes in Africa across its areas of focus ie:

- awareness and prevention of diabetes
- education and training of patients and health professionals
- improved access to essential diabetes medications
- enhanced detection and monitoring of diabetes

- **The Oxford Health Alliance** ([www.oxha.org](http://www.oxha.org))

The Oxford Health Alliance (OxHA) is a non-government, non-profit organisation that is confronting epidemic chronic diseases by concentrating on the three risk factors of smoking, unhealthy diet and lack of physical activity which are causes of the four diseases - cardiovascular disease, diabetes, respiratory disease and certain cancers - that are responsible for fifty percent of the world's mortality. OxHA will hold its annual Summit meeting in Africa in 2006 on chronic diseases in transition. The OxHA website has useful information and presentations which can be downloaded – particularly on its major themes which are:

- mounting the economic argument for investing to prevent chronic diseases
- prevention in the workplace
- schools and youth and prevention
- urban design
- industry (food, pharmaceutical, sport)

- **The People’s Health Movement** ([www.phmovement.org](http://www.phmovement.org))

The People’s Health Movement (PHM) is a grass roots movement which was born of the poverty of countries such as India and Bangladesh and is now active in over 100 countries. The PHM wants “health for all now”. It calls for a strengthening of the WHO as the global health agency of the United Nations and calls for a revitalisation of the principles of the Alma-Ata Declaration and complete revision of international and domestic policy that has shown to impact negatively on health status and systems. Its vision, objectives, health charter, alternative health report (Global Watch) and the context in which it developed are well suited to, and could serve as an empowerment model for sub-Saharan Africa.

- **The Millennium Villages Project** ([www.millenniumpromise.org](http://www.millenniumpromise.org))

This project focuses on Africa and aims to “end extreme poverty – one village at a time” and is predicated on the belief that towns of around 5,000 people can escape poverty if they are supported and empowered with the appropriate technologies to improve their agricultural productivity, health, education and access to markets. Since poverty and diabetes are closely entwined for many inhabitants of sub-Saharan Africa it is entirely appropriate to explore and pursue linkages and synergies between the Diabetes Strategy and the Millennium Villages Project.

- **Additional linkages and resources**

There are a number of important organisations which could greatly enhance implementation of the Strategy to prevent diabetes and related chronic diseases and improve the management of overt disease either on a national or regional basis. These include:

- employee unions
- business associations and councils
- local government associations and planning institutes
- disease specific Non Government Organisations (NGOs) such as heart, kidney, stroke, cancer foundations
- the International Obesity Task Force
- web-based consumer organisations and international philanthropic organisations
- health professional societies and association (in addition to diabetes organisations)

**Some additional useful resources and reference material includes:**

- *Diabetes Atlas* (IDF, 2003) which contains background, costing and epidemiological information about diabetes across the seven IDF Regions including Africa. An updated version will be released at the Cape Town IDF World Congress in December 2006.

- *Guide for Guidelines* (IDF, 2003). This document presents a reasonably user friendly outline of methods for identifying evidence and proposes and details pathways for either developing guidelines or deriving guidelines ie adapting existing guidelines to local circumstances.
- Following on from the 2003 guide for developing guidelines, the IDF has developed a *Global Guideline for Type 2 Diabetes* (IDF, 2005) (available from the IDF website) which presents a ‘levels of care’ approach to internationally recognised and evidence based standards of care that takes account of national resources and tailors the recommendations accordingly.
- *Diet, Nutrition and the Prevention of Chronic Diseases* (WHO, 2003). This document includes: global and regional food consumption patterns and trends; diet, nutrition and chronic diseases in context; population nutrient intake goals for preventing diet related chronic diseases; and strategic directions and recommendations for policy and research.
- *The Global Strategy for Diet and Physical Activity* (2004) outlines the WHO position on promoting health and reducing disease through the adoption of healthy diets and appropriate physical exercise as endorsed by the WHO member states at the 57th World Health Assembly in May, 2004. The Strategy is being actively implemented by the WHO Regions.
- The WHO publication *Preventing Chronic Diseases: A Vital Investment*, (2005) is available from the WHO website and provides a wealth of information, argumentation and evidence in support of intervening to stem the tide of chronic diseases.
- WHO also hosts a tobacco site which is maintained by the Centres for Disease Control Atlanta USA, which provides information on tobacco use across the sub Saharan African countries. This can be found at <http://www.cdc.gov/tobacco/who/whoafpro.htm>
- *The National Diabetes Programs Toolbox* (Colagiuri R et al, 2003) works through issues and considerations for a wide range of areas from measuring the extent of the problem to addressing and evaluating it eg prevalence studies, community awareness/early detection programs, routine clinical monitoring and data collection and evaluating national programs. This booklet provides practical advice and tips across the spectrum of content areas that make up a comprehensive national diabetes program.

## Part 4: The Strategy

## Goals, objectives, strategies and outcomes

These goals represent the broad priorities identified by diabetes experts and opinion leaders from sub-Saharan Africa. The most pressing priorities are to alleviate the suffering and unnecessary early death of people with diabetes, find and treat those who have diabetes but do not yet know it and to prevent new cases of diabetes (Goals 1 and 2). However, it is well recognised among the diabetes professional community that such attempts cannot be truly effective without addressing the systems, which need to underpin such efforts. These are outlined in Goals 3 and 4.

### Primary Goals

#### Goal 1: Prevent diabetes and related non-communicable diseases

##### Objectives

- Reduce existing modifiable diabetes and related non-communicable disease risk factors in people and community groups with identifiable risk factors
- Prevent the development of risk factors in the general population

##### Specific strategies

- Train all primary care workers in the basics of health promotion and health education
- Encourage adherence to the beneficial aspects of traditional cultural life eg physical activity
- Establish intergovernmental, government and private partnerships, and mechanisms to ensure community involvement to create healthier environments

##### Outcomes

- A reduction in risk factors such as obesity
- A reduction in the number of people developing modifiable risk factors for diabetes and related chronic diseases
- A long term reduction in new cases of diabetes

#### Goal 2: Improve quality of life and reduce morbidity and premature mortality from diabetes

##### Objectives

- Avoid missed diagnosis of Type 1 diabetes

- Achieve earlier diagnosis of Type 1 diabetes, Type 2 diabetes and gestational diabetes
- Improve the quality and accessibility of diabetes care
- Reduce diabetes related complications eg amputation, blindness, kidney disease

### Specific strategies

- Raise community awareness of risk factors for undiagnosed diabetes
- Train primary care staff to recognise and detect risks for undiagnosed diabetes
- Train and equip primary care staff to provide routine clinical care, self-care education, and basic psychosocial support
- Establish and equip specialised diabetes care centres to train and support primary care workers and provide cost effective secondary and tertiary care to people with complex needs eg complications, co-morbidities
- Develop mechanisms to ensure adequate supplies of insulin and other essential medications and supplies

### Outcomes

- Specialised diabetes centres and primary care staff with specific training in diabetes are an integral part of African health systems
- A reduction in child mortality from diabetes
- A reduction in the presence of discernable complications at diagnosis
- A reduction in all diabetes complications
- A reduction in premature mortality from diabetes

**Goal 3: Build the capacity of health systems to provide fair and equal access to high quality diabetes prevention, care, education and support services and supplies**

### Objectives

- Improve organisational infrastructure
- Train all levels and categories of the health care workforce in diabetes prevention and care
- Establish and maintain systems to monitor quality and outcomes of care

- Establish, maintain and monitor systems for clinical effectiveness and clinical governance

## Specific strategies

- Integrate and harmonise diabetes care into existing health care systems
- Review or develop relevant curricula for training in diabetes prevention and care at all levels of training of healthcare personnel
- Develop and implement IDF Africa Region Clinical Practice and Diabetes Education Guidelines and use them in evaluation of outcomes
- Establish an inventory and audit system of diabetes health facilities to monitor effectiveness of healthcare delivery

## Outcomes

- There is universal access to basic essential medications and supplies
- An appropriately skilled workforce is distributed and equipped to provide effective and equitable access to prevention and care services for diabetes and related chronic diseases
- Consistent standards and systems of care and education are widely implemented
- Systems are in place to monitor and evaluate and continuously improve quality of care
- The countries of sub-Saharan Africa will have within their Ministries of Health a discrete position/s with clear responsibility for diabetes and/or related chronic diseases as a whole or part of its brief
- The majority of the countries of sub-Saharan Africa will have active diabetes action plans that are integrated or articulate with other relevant chronic disease strategies

**Goal 4: Conduct relevant research to improve our knowledge and ability to prevent, delay, and manage diabetes to reduce its impact and assess the impact of care**

## Objectives

- Obtain baseline data on diabetes and chronic disease risk factors
- Identify and test methods and models of care to optimise efficiency and effectiveness and the physical and psychological outcomes of diabetes care

- Identify and test methods and strategies to prevent diabetes

### **Specific strategies**

- Seek assistance from WHO to conduct the STEPS surveys and train African health professionals and researchers in this methodology
- Develop a regionally consistent core minimum diabetes outcomes dataset to promote consistency of data collection
- Establish training and mentoring mechanisms to encourage and support young researchers
- Foster evaluation of the outcomes of diabetes services at the clinical level
- Include qualitative and quantitative research methodology in undergraduate medical and nursing courses
- Encourage research at the primary care level to evaluate community models for diabetes prevention

### **Outcomes**

- Baseline epidemiological information and quality of care data (based on a consistent core dataset) is available to assess the effectiveness of prevention and care systems
- Centres of research excellence are identified on a national or regional basis to provide training, mentoring and peer support to researchers from less well resourced locations
- A database of Africa specific research evidence is available to support the medical, educational and behavioural treatment and management of diabetes and its complications
- Africa specific medical, educational, behavioural and health services research evidence is available and is used to inform and guide policy, resource allocation and service delivery

## Key focus areas for action

This section of the Strategy provides examples of possible key focus areas for action. These illustrate one option for a planning framework. They are examples only and are not intended to be exhaustive. Two excellent examples of planning – one from the Nairobi and one from the Bamako 2006 National Diabetes Programmes Workshops convened jointly by IDF and WHO Africa are shown in Appendix 1 and 2 respectively.

Figure 5 illustrates the chronic disease process and shows key intervention points, highlighting the need for different approaches to clinical care and patient education and self management skills required at different points along the continuum of care. Finally, the diagram shows the four cornerstones or key action areas to support primary prevention and optimise the outcomes of care:

- Policy and planning
- Quality and safety
- Information and education
- Equity and access

### Policy and planning

Appropriate social and public policy is required to ensure healthy anti-obesogenic and anti-diabetogenic environments.

#### **Action**

The partners in the Diabetes Declaration and Strategy to approach governments to align their policies with internationally accepted recommendations for health promotion and disease prevention and equitable access to essential services, medications and self care supplies

- could join with other relevant disease specific NGOs to do this

#### **Indicator**

Number of countries in sub-Saharan Africa with social and public policies that support internationally recognised standards of health promotion, disease prevention and equitable access for chronic diseases

**Planning** for improved diabetes prevention services and care that is affordable and equitable is required to ensure appropriate care and optimal outcomes for all people with diabetes.

### Action

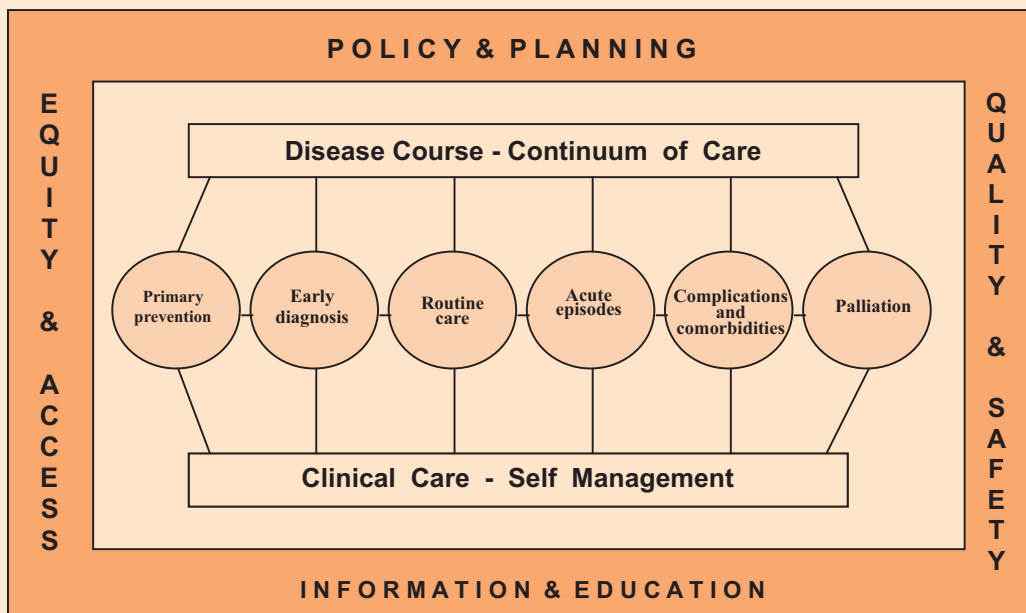
Develop national action plans based on population, epidemiological, costing and clinical outcomes data (where available) to plan services for diabetes and related NCDs

- should include role definition/delineation for services and the workforce
- should be based on principles of equity, effectiveness, integration, and capacity building
- should emphasise access to essential medications

### Indicators

Number of countries in sub-Saharan Africa with active diabetes and related actions plans based on the Diabetes Declaration and Strategy and the African Diabetes Guidelines

**Figure 5: Framework for diabetes and related chronic disease prevention and care**



## Quality and Safety

Quality and safety relates to appropriateness and timeliness of treatments and interventions and ensuring that harm and/or exposure to the risk of harm from any treatment or intervention is avoided or at least minimised. In addition to appropriate policy and adequate and equitably allocated resources, the key factor in ensuring quality and safety is the health workforce and providing them with training, guidelines, and protocols detailing the competencies and standards of care they are expected to provide.

**Medication, supplies and equipment** for diabetes care are required to be available, effective and safe.

### Action

Develop a standardised basic list of essential medications, supplies and equipment required for diabetes care, using the African Diabetes Guidelines as the standard, and promote this to governments at the country level for use as the basis for purchasing and safety policies (and legislation ) where appropriate. This should emphasise access to essential medications

### Indicators

- List developed
- Number of countries in sub-Saharan Africa with governments using the 'essential' diabetes list as the basis for purchasing and quality and safety policy and legislation

**Good clinical governance** is required to ensure the safety of treatments and interventions.

### Action

Establish and implement information systems and accountability mechanisms in the form of clinical protocols, pathways, referral criteria and reporting systems based on the care requirements laid out in the African Diabetes Guidelines

### Indicator

Number of countries in sub-Saharan Africa with clinical governance systems in place

## Information

**Epidemiological information** is required to underpin and guide policy, planning and the provision of clinical services.

### Action

Undertake WHO STEPS NCD Risk Factor Surveillance surveys in countries which do not have adequate epidemiological baseline data on diabetes and related chronic diseases

### Indicator

Number of countries in sub-Saharan Africa with current baseline prevalence data on diabetes

**Economic information** on the cost of illness of diabetes is required as a baseline against which the effectiveness of interventions can be assessed on a long term population basis and to guide health policy and the allocation of resources.

### Action

Collect cost of illness data on diabetes

- could adapt and apply T2ARDIS or Diabco\$ Australia methodology
- could be done in tandem with the WHO STEPS surveys

### Indicator

Number of countries in sub-Saharan Africa with current baseline data on the cost of diabetes

**Clinical information** systems are required to monitor quality of care and provide feedback to clinicians, policy makers, planners and consumers.

### Action

Agree on a minimum core data set for clinical outcomes and establish systems to collect the data

- could use a Diabcare Europe or Diabcare Asia annual snapshot data collection method
- could identify initial sentinel sites at a regional or national level to pilot this initiative

### Indicator

- Number of countries in sub-Saharan Africa with current clinical outcomes data on diabetes collected according to an agreed and regionally consistent dataset
- Number of countries monitoring clinical outcomes on a regular basis (eg 5 year audits)

## Education

**Workforce education** and training is required to ensure access to effective and equitable diabetes prevention and care for all people who need it.

### Action

Agree on the core competencies required eg for primary care and develop appropriate levels of nationally consistent training programs for diabetes management for the various health disciplines. This should include training for:

- primary care physicians
- community nurses
- HIV/AIDS workers
- village health workers
- traditional healers

### Indicator

Number of countries in sub-Saharan Africa with current consistent diabetes management training programs being actively implemented

**Patient education** as the basis for optimal self management is well recognised worldwide as an essential component of effective diabetes care. This can only be achieved by educating the health workforce.

### Action

Agree on the core competencies required for patient education eg for primary care and develop appropriate levels of (nationally consistent) training programs for patient education for the various health disciplines. This should include training for:

- primary care physicians
- community nurses
- HIV/AIDS workers
- village health workers
- traditional healers

### Indicator

Number of countries in sub-Saharan Africa with current consistent diabetes education training programs being actively implemented

## Equity and access





## Part 5: Coordination

## Coordination

No matter how well thought through, thorough and practical it may be, any strategy is only as effective if it is widely and systematically implemented. The key to successful implementation is coordination. This requires all parties to devote careful attention to agreeing on, and documenting their agreement, about structures and processes to ensure optimal uptake of the principles and recommendations of the Diabetes Strategy for Africa. This will need to cover:

- The regional level
- The individual country level
- The local community level

### Regional level coordination

#### 1. Regional Steering Committee

##### **Establish a regional organisational structure to co-ordinate implementation of the Declaration and Strategy**

This is required to provide leadership and set direction regarding overall implementation of the Declaration and Strategy at the regional level. Its core role could include:

- Regional coordination and communication
- Providing advice and mentoring to country specific leaders and counterparts
- Establishing and maintaining a regional advocacy and lobbying platform
- Providing examples and templates for use by individual countries where appropriate
- Establishing and co-ordinating regional subcommittees or working groups where required
- Fundraising
- Engaging the corporate/business sector
- Monitoring and reporting progress on a regional basis

An appropriate regional co-ordinating structure should be identified by consensus between the key partners ie IDF-Africa, WHO-AFRO and the African Union. It

should be guided by appropriate governance mechanisms including explicit Terms of Reference that:

- describe its overall role
- indicate and provide a rationale for the composition of the Steering Committee
- indicate specific key functions and core responsibilities
- identify a timeframe for review of progress

Either in the Terms of Reference or elsewhere it should be specified how the Regional Steering Committee will operate. For example, who will chair the Committee, will the chair rotate between the partners and if so how often will the chair change? Will a joint Secretariat be established or will each of the partner organisations use their existing arrangements? How will any finances allocated to the Declaration and Strategy be handled? Will a separate fund be established? Who will have access to and responsibility for this?

Other issues that will need to be determined may centre around the inclusion of other partners at the regional level. What would be the criteria for inclusion? If industry partners were to be included, what mechanisms would need to be put in place to avoid conflicts of interest?

## 2. Identify focal points in each country

### Establish a network of key people in each country to facilitate communication and co-ordination

The WHO routinely works through in-country focal points eg NCD focal points. IDF-Africa and the African Union should also identify key people to become 'focal points' in each country to form a communication network for disseminating and gathering relevant information between the Regional Steering Committee and each country. In medium to high resource countries, along with representatives from professional organisations, senior medical clinicians, diabetes nurses and researchers could form country specific co-ordinating bodies. Even in low resource countries where there may be insufficient resources or opportunity to establish a formal national Steering Committee, focal points could be used as a surrogate co-ordinating body.

### 3. Develop a workplan

#### Develop a broad-based work program to itemise and prioritise activities for the Regional Steering Committee

This does not need to be detailed but should indicate short and mid-term priorities for action e.g. what needs to be done in the first year and what needs to be done in the first three years. This might include the issues around disseminating and publicising the Declaration and Strategy, establishing sub-committees and working groups if required; raising funds to enable strong regional co-ordination; developing an advocacy strategy and implementation plan.

### 4. Develop an advocacy and lobbying strategy

#### Develop and document a strategy for advocacy and lobbying to ensure optimal adoption of the Declaration and Strategy

The partners should agree on and document the essential components of an advocacy and lobbying strategy to promote optimal uptake of the Declaration and Strategy. This will involve:

- identifying a few strong and simple key messages
- determining who needs to know about the Declaration and Strategy
- identifying who can influence those who need to know about it eg media, voters, academics, researchers, clinicians, organisations, government sectors other than health eg education, transport, tourism, agriculture
- identifying key opinion leaders and champions to lead the advocacy and lobbying
- developing a targeted stepwise action plan to implement the advocacy strategy.

### 5. Engage the corporate business world

#### Engage and involve the corporate/business organisations and entities in supporting the Declaration and Strategy

Big business needs to be engaged in supporting the Declaration and Strategy for a number of reasons. These large multi-national companies have a social responsibility

to the countries they operate in and a responsibility to their workforce. They are highly influential both through their products and services and through the pressure they can bring to bear on government. As employers of large numbers of people, they can also be used as a channel for disseminating health messages.

The advocacy strategy should heavily target big corporations including the pharmaceutical industry, food industry, leisure industry and any business that employs large numbers of people and whose products, services or operations impact on the environment and the health of the people.

## **6. Provide support and mentoring for individual countries**

### **Provide support and mentoring to assist individual countries to assist and establish their own mechanisms for implementing the Declaration and Strategy**

A key function of the regional co-ordinating body would be to communicate with, assist and empower individual countries in their efforts to use and implement the Declaration and Strategy to optimal effect. This might include:

- the establishment of regular communication
- assisting and advising on the establishment of national steering committees
- the provision of templates eg for practical procedures (eg terms of reference, handling money) or policy development such as national action plans.

The latter also has the benefit of promoting consistency of standards.

## Country level coordination

### 1. Establish a national coordinating mechanism

#### Establish a national organisational structure for coordinating adoption and implementation of the Declaration and Strategy in each country

As for the regional coordinating body, a national coordinating body is essential to provide direction and advocacy to promote optimal uptake of the Declaration and Strategy at individual country level. This could take the form of a Steering Committee, Task Force or may, if convened by the national Ministry of Health (MoH), be formed as an Advisory Committee.

The requirement to develop Terms of Reference and document governance procedures such as the receipt and use of money (if applicable) or the involvement of industry would be the same as for the Regional Steering Committee. However, a National Steering Committee operating at the level of an individual country would differ from the Regional Committee in the following ways.

- It would be responsible for activities only in its own country
- It would need to include representation from a range of stakeholder groups not just the three lead partner organisations and should be based around the national diabetes organisation. If there is no national diabetes organisation, every effort should be made to establish one and use it as a focal point for communication for activities associated with the Declaration and Strategy
- Its advocacy strategy and communication strategy would need to target the national government and engage the (health) professional community of clinicians, researchers and academics, related NGOs, and the general public in a more direct way ie relating explicitly to national issues, needs and priorities and taking account of the national socio-political context.

### 2. Develop a national diabetes action or implementation plan

#### Develop a national strategy or action plan for implementing the Declaration and Strategy

The development and documentation of an action or implementation plan for each country would be a core function of the National Steering Committee. This does not need to be a complex or lengthy process but should be guided by the nine points of the

Declaration and based on the four goals of the Strategy. The documentation of even a simple plan is important as it provides an opportunity to:

- Interpret the Declaration and Strategy in the light of the national political, cultural and health system context
- Identify local priorities and timeframes
- Adapt implementation to national resources.

## Local coordination

### Foster and support community engagement and responsibility for health issues and health service delivery decision making

Local coordination is vital to the success of the Declaration and Strategy. This can vary in sophistication depending on the population size and socio-economic context. Regardless of this the key characteristic should be self determination ie community and local primary care health worker involvement in determining:

- what local coordination is required
- what services should be delivered and how they should be delivered
- how this should be co-ordinated and by whom.

Where possible this should be supported by the National Steering Committee and Regional Steering Committee through the dissemination of relevant information, advice, or practical tools, templates or formats eg for data collection, patient records, standards of care.

### Options for achieving local coordination include:

- *Local Health Boards*

Successful models for community involvement include those where Local Health Boards are established to consult with local consumers and work with health authorities and community members alike to determine local priorities. Such boards should be have an age and gender balance and, in non-homogeneous communities, an ethnic and religious balance.

- *Hub and spoke models*

These involve the local health worker/s as the point of contact for consultation as well as service delivery. The local health workers have a brief to consult with the community about health care needs on a continuing basis and to report the results of this consultation to their superiors as part of their routine reporting and accountability.

- *Ad hoc consultation*

This can be done as a series of one-off consultations on the basis of issues as they arise. Local health workers and/or local health authorities can convene a community consultation at the local town or village hall or traditional meeting place to brief community members about health care issues and seek their input.

- *Workplace consultation*

Although not strictly 'community', workplace consultation can act as a surrogate for community consultation in areas where workers also live in the local community.

Whichever method is used, local community engagement in health is vital to encouraging personal responsibility for health, the creation of healthier environments, and the establishment of a strong grass roots advocacy movement to support national and regional lobbying. Most of all, it is vital to aligning and improving local health care delivery with local needs.

# Part 6: Key Implementation Strategies

## Key implementation strategies

This section expands on and provides some examples and options for operationalising the key strategies listed on page 10.

### Advocacy

#### Form partnerships to build a strong and united voice to raise awareness of the threat of diabetes and related chronic diseases

##### Key points

- A broad-based advocacy platform that is integrated across related chronic diseases will have a stronger voice than advocacy for a single disease area only
- Investment in a number of similar diseases is more appealing to governments than investment in a single disease area
- It is imperative to identify and network with major NGOs, and key opinion leaders among health professionals and academics in disease areas that are related to diabetes
- Some countries eg Canada, the USA and Australia have established formal alliances of disease specific areas including diabetes, heart, stroke, kidney and cancer NGOs to strengthen their voice and broaden their strategic development capacity
- It is important to agree key issues and areas of overlap and develop standardised messages about them
- This is particularly relevant with regard to primary prevention as lifestyle risks such as overweight, physical inactivity, smoking and inappropriate nutrition are central causative factors for many chronic diseases
- Lobbying government should be broader than lobbying the Ministry of Health - target a range of government sectors including agriculture, transport, industry, employment and treasury to invest in health and health environments
- Lobby big business to contribute to health and provide health programs for their workers.

##### Key message

- there is an urgent need to act to reduce the threat of diabetes and related NCDs

- effective treatment is available for Type 1 and Type 2 diabetes
- Type 2 diabetes can be prevented or significantly delayed
- the threat of diabetes is such that it is less costly to act than not to act
- an investment in diabetes brings gains in other areas eg heart disease

## Empowerment

### Empower individuals, families and communities to prevent and manage diabetes optimally

#### Key points

##### *Individuals*

- All information and education provided to people with diabetes at any level of literacy should seek to empower them to understand diabetes and its causes, treatment requirements, and self care recommendations and skills including why they are required and their role in reducing the impact of diabetes. People with diabetes should be informed that effective treatment is available and how to access supplies. It also needs to be emphasised that:
  - diabetes complications are not inevitable.
- In low resource countries or areas where an appropriate standard of treatment, medication and self care supplies is not available, this then becomes an advocacy issue. People with diabetes and their families and carers should be encouraged and assisted to participate in any advocacy and lobbying activities aimed at procuring access to these vital requirements.
- People with diabetes should also be informed of the potential to prevent Type 2 diabetes and encouraged to pass on health messages and practice healthy lifestyle choices within their families. Women in particular in their role as carers can be motivated to protect their family's health by adopting healthy meals and encouraging physical activity. Men too can be motivated to use their authority and example as heads of the household to be role models for healthy lifestyle in their families and communities.

##### *Communities*

- Community empowerment and action is vital to creating environments that support optimal health outcomes. This applies to primary prevention as well as the provision of health services. Community councils and health groups are active in many countries both in the developed and the developing world. These groups have input into community development and issues that affect health. In

some African countries there are examples of community controlled health services where the community, in partnership with health authorities, takes responsibility for determining what services are required and how they should be delivered. In some cases the health care providers are responsible and accountable to the community for the services they provide.

## Key message

Ensure that all individual and community education about diabetes conveys the message that:

- diabetes is serious
- diabetes can be prevented and/or treated and controlled
- “you” can do something about it

## Prioritisation

### Identify and set priorities to promote appropriate resource allocation

To make the best use (highest impact) of scarce resources, engage all stakeholders in assessing the needs versus available resources, and in setting regional, national and local priorities for what needs to be done, in what order, and to what extent.

## Key points

### *Low resource settings*

- Priorities may vary in different settings and for low resource settings the primary goals for diabetes will most likely focus on procuring:
  - life saving insulin for children and adults with Type 1 diabetes
  - essential medications for people with Type 2 diabetes and women with GDM.
- If the government cannot provide these, strategies need to be put in place such as advocacy and lobbying to promote government action to provide these medications, and strategies to procure these essential medications through donor agencies.

- Other priorities in low resource settings may be to ensure that all HIV/AIDS

- strategic planning and prioritisation.

## Key points

- Define what needs to be done for diabetes prevention and care
- Delineate roles and define workforce competencies
- Identify the required level of services eg primary care, specialist services, semi specialised services and configure services for optimal effectiveness and equity of access
- Identify what staff and services are available to do this now or who/what can be refocussed and reallocated to meet the identified needs and service levels
- Train staff on the required competencies
- Put governance systems in place to support the roles eg organisational structures, accountability and reporting lines and criteria, and job descriptions
- Equip services to the best possible level within available resources
- Support the staff and services to optimise value for money and effort with guidelines for resource use, clinical guidelines, clinical pathways and referral criteria
- Build capacity in the area of systems to support optimal prevention and care ie:
  - research capacity in the form of training and development across all types of research
  - develop appropriate information systems and train staff to use them appropriately
  - introduce and maintain systems for evaluation and quality improvement.

## Key message

Capacity building is about looking at what you have and finding ways to make it work better

**Make diabetes “everybody’s business”**

## Involve everyone in taking responsibility for combating diabetes

Directly or indirectly, everyone is affected by diabetes ie individuals, families, communities, schools, churches, health professionals, and politicians from all government sectors, non-government organisations, business and industry.

### Key points

- Promoting the concept that “diabetes is everybody’s business” personalises the threat of diabetes and is, therefore, a useful strategy for creating widespread public awareness
- This concept can be promoted by use of simple factual messages highlighting the impact of diabetes on families, communities, and the economy. This can highlight the personal health impact, threat to earning capacity, impact on gender roles, productivity, the health of the workforce and its impact on economic stability
- Using champions eg from among respected clinicians, academics, and politicians to promote this message may have an added impact as will the use of celebrities (sports stars and entertainers who may have diabetes) or, in small rural communities, respected community elders or ‘heroes’
- Use the Diabetes Declaration and Strategy to spread the message that “diabetes is everybody’s business”
- Use all facets of the health system eg village health workers, HIV/AIDS workers and traditional healers to include diabetes and its prevention as a component of the care they provide.

### Key message

Make the connection in the minds of the public, the government and business that:

- everyone knows someone with diabetes
- diabetes can affect anyone
- diabetes “hurts” everyone in some way or another



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# Appendices

# Appendix 1

## Planning template – IDF Africa Region and WHO AFRO Workshop Nairobi, Kenya, 2-3 March 2006

<b>Objectives</b>	<b>Strategy</b>	<b>Actions</b>	<b>Barriers</b>
<b>Develop champions at the following levels:</b> <ul style="list-style-type: none"> <li>- Political</li> <li>- Technical</li> <li>- Associations</li> </ul>	<ul style="list-style-type: none"> <li>- Develop a national plan</li> </ul>	<ul style="list-style-type: none"> <li>- Involve all actors in the development of this document</li> </ul>	<ul style="list-style-type: none"> <li>- Financial</li> <li>- Interest in diabetes</li> <li>- Competing interests</li> <li>- Lack of resources</li> </ul>
<b>Increase awareness of diabetes</b>	<ul style="list-style-type: none"> <li>- Have an increase in knowledge of what diabetes is</li> </ul>	<ul style="list-style-type: none"> <li>- Sensitisation and information Activities for World Diabetes Day</li> <li>- Meetings and discussions about diabetes</li> <li>- Decentralisation of national associations</li> <li>- Advocacy with government</li> </ul>	
<b>Improve diabetes care</b>	<ul style="list-style-type: none"> <li>- Improve the health system for diabetes care</li> </ul>	<ul style="list-style-type: none"> <li>- Development and implementation of a national diabetes programme</li> <li>- Reorganise health services for adequate care for people with diabetes</li> <li>- Availability of medication and insulin</li> <li>- Decentralisation of care to secondary level</li> </ul>	

## Planning template – IDF Africa Region and WHO AFRO Workshop Nairobi, Kenya, 2-3 March 2006

<b>Objectives</b>	<b>Strategy</b>	<b>Actions</b>	<b>Barriers</b>
<b>Improve data collection</b> <ul style="list-style-type: none"> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Improve data collection</li> </ul>	<ul style="list-style-type: none"> <li>- Develop patient files</li> <li>- Develop registers</li> <li>- Monthly reporting systems</li> <li>- Organise data collection and reporting at a national level</li> </ul>	
<b>Advocacy at a local level</b> <ul style="list-style-type: none"> <li>- Raise awareness of patients/public/policy makers</li> <li>- Influence policy change and structure</li> </ul>	<ul style="list-style-type: none"> <li>- Form interest groups</li> <li>- Role of diabetes associations</li> </ul>	<ul style="list-style-type: none"> <li>- Organise sensitisation meetings</li> <li>- Integrate diabetes activities into important public events</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate funds</li> <li>- Diabetes is not a priority</li> <li>- Lack of political will</li> <li>- Archaic policies</li> <li>- Lack of data</li> <li>- Lack of research</li> <li>- Lack of human resources</li> <li>- Lack of adequately trained personnel</li> </ul>
<b>Advocacy at International level</b> <ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- United Nations (UN) resolution on diabetes</li> <li>- African Declaration on diabetes</li> <li>- IDF Twinning Initiative</li> </ul>	<ul style="list-style-type: none"> <li>- Promote initiatives at international, regional and local meetings and solicit for funding</li> <li>- Present papers at meetings</li> <li>- Publish papers</li> </ul>	<ul style="list-style-type: none"> <li>- Political situation in the country</li> <li>- Lack of information</li> <li>- Lack of access to e-mail and other communication systems</li> <li>- Lack of response to correspondence</li> </ul>
<b>Advocacy with Multilateral partners</b> <ul style="list-style-type: none"> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Involve other national stakeholders</li> </ul>		
<b>Advocacy with Donor Agencies</b> <ul style="list-style-type: none"> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Get them involved with diabetes</li> </ul>		

# Planning template – IDF Africa Region and WHO AFRO Workshop Nairobi, Kenya, 2-3 March 2006

<b>Objectives</b>	<b>Strategy</b>	<b>Actions</b>	<b>Barriers</b>
<b>Facilitate training</b> <ul style="list-style-type: none"> <li>- Capacity building for health professionals</li> <li>- Improve health care delivery</li> </ul>	<ul style="list-style-type: none"> <li>- Develop curriculum for undergraduate training and ongoing training</li> <li>- Provide Information, Education and Communication (IEC) materials</li> </ul>	<ul style="list-style-type: none"> <li>- Include in curriculum (medical school, nursing training, etc.)</li> <li>- Provide continuous medical education</li> <li>- Provide IEC materials</li> <li>- Advocacy</li> <li>- Training of trainers</li> <li>- Manuals</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate funds</li> <li>- Diabetes is not a priority</li> <li>- Lack of political will</li> <li>- Archaic policies</li> <li>- Lack of data</li> <li>- Lack of research</li> <li>- Lack of human resources</li> <li>- Lack of adequately trained personnel</li> </ul>
<b>Collaborating with stakeholders</b> <ul style="list-style-type: none"> <li>- Improve intersectoral links and support</li> <li>- Avoid overlap in activities</li> <li>- Develop sustainable programmes</li> </ul>	<ul style="list-style-type: none"> <li>- Harmonise common objectives</li> <li>- Provide for interaction</li> </ul>	<ul style="list-style-type: none"> <li>- Organise meetings</li> </ul>	
<b>National Awareness Programme</b> <ul style="list-style-type: none"> <li>- Target specific groups</li> <li>- Advocacy</li> </ul>	<ul style="list-style-type: none"> <li>- Research</li> <li>- Harmonise common objectives</li> <li>- Create a forum for discussion</li> </ul>	<ul style="list-style-type: none"> <li>- Allocate tasks</li> <li>- Conduct research</li> </ul>	
<b>Patient support services</b> <ul style="list-style-type: none"> <li>- Equity of access to health care</li> <li>- Improvement of patient care</li> </ul>	<ul style="list-style-type: none"> <li>- Formulating and implement care friendly policies</li> <li>- Setting minimum standards of management</li> <li>- Research</li> </ul>	<ul style="list-style-type: none"> <li>- Allocate specific tasks</li> <li>- Set management guidelines and monitoring and evaluation of programmes</li> </ul>	
<b>Fundraising</b> Provide sustainable funding for: <ul style="list-style-type: none"> <li>- Health care services</li> <li>- Research</li> </ul>	<ul style="list-style-type: none"> <li>- Involve potential funders e.g. governments, pharmaceutical companies, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify and make proposals to funding agencies</li> </ul>	

# Planning template – IDF Africa Region and WHO AFRO Workshop

Nairobi, Kenya, 2-3 March 2006

Objectives	Strategy	Actions	Barriers
<b>Patient and public education</b> <ul style="list-style-type: none"> <li>- Increase awareness and empowerment of patients</li> <li>- Enhance use of available services</li> <li>- Develop primary prevention strategies to delay complications</li> </ul>	<ul style="list-style-type: none"> <li>- Structured education to stakeholders: patients, healthcare workers, etc.</li> <li>- Research</li> </ul>	<ul style="list-style-type: none"> <li>- Provide IEC materials</li> <li>- Conduct research</li> <li>- Public screening</li> </ul>	
<b>Policy development</b>	<ul style="list-style-type: none"> <li>- Active Focal person at the MoH</li> <li>- Make sure that NCDs are on the strategic plan for the MoH</li> </ul>	<ul style="list-style-type: none"> <li>- Focal person to be appointed by MoH</li> <li>- Establish networks between country focal people</li> <li>- IDF and WHO AFRO to formalise communication issues with ministries of health and associations</li> </ul>	<ul style="list-style-type: none"> <li>- No active focal person for NCDs</li> <li>- NCDs not a priority</li> <li>- Lack of data on NCDs in sub-Saharan Africa</li> </ul>
<b>Action plan</b>	<ul style="list-style-type: none"> <li>- Prioritise diabetes among NCDs</li> </ul>	<ul style="list-style-type: none"> <li>- Lobby MoH to implement Maputo list of health priorities</li> <li>- Ensure a separate budget and plan for NCDs</li> <li>- Search for alternative sources of funding</li> </ul>	<ul style="list-style-type: none"> <li>- Competing priorities between Communicable Diseases and NCD</li> <li>- Poverty</li> <li>- Lack of political will</li> </ul>
<b>Provision of care at Primary Healthcare facilities</b>	<ul style="list-style-type: none"> <li>- Establish Register for Surveillance</li> <li>- Make presumptive diagnosis</li> <li>- Routine Care and Referral</li> <li>- Education of patients</li> </ul>	<ul style="list-style-type: none"> <li>- Develop registers</li> <li>- Provide guidelines for diagnosis and care</li> <li>- Provide blood and urine strips</li> </ul>	<ul style="list-style-type: none"> <li>- Cost</li> <li>- Lack of trained personnel</li> </ul>

## Planning template – IDF Africa Region and WHO AFRO Workshop Nairobi, Kenya, 2-3 March 2006

<b>Objectives</b>	<b>Strategy</b>	<b>Actions</b>	<b>Barriers</b>
<b>Provision of care at Secondary Healthcare facilities</b>	<ul style="list-style-type: none"> <li>- Detailed Register</li> <li>- Confirmation of diagnosis from Primary facilities</li> <li>- Diabetes Education</li> <li>- Screen for Complications</li> <li>- Routine care, referral and support</li> </ul>	<ul style="list-style-type: none"> <li>- Provide appropriate equipment</li> <li>- Training</li> </ul>	<ul style="list-style-type: none"> <li>- Cost</li> <li>- Lack of personnel</li> <li>- Training</li> </ul>
<b>Provision of care at Tertiary Healthcare facilities</b>	<ul style="list-style-type: none"> <li>- Establish Diabetes Centres</li> <li>- Management of complications</li> <li>- Generate data on diabetes and its complications</li> </ul>	<ul style="list-style-type: none"> <li>- Physical structure</li> <li>- Capacity building</li> <li>- Support and research</li> </ul>	<ul style="list-style-type: none"> <li>- Cost</li> <li>- Lack of personnel</li> <li>- Training</li> <li>- Lack of commitment</li> </ul>
<b>Treatment guidelines</b>	<ul style="list-style-type: none"> <li>- Increase access to treatment guidelines</li> </ul>	<ul style="list-style-type: none"> <li>- Adjust to local needs and specifications</li> <li>- Workshops</li> </ul>	<ul style="list-style-type: none"> <li>- Funds</li> </ul>
<b>Supply and Logistics</b>	<ul style="list-style-type: none"> <li>- Continuous supply of medicines and other tools</li> </ul>	<ul style="list-style-type: none"> <li>- Identify reliable sources</li> <li>- Work closely with importers (public and private)</li> </ul>	<ul style="list-style-type: none"> <li>- Poor distribution networks</li> <li>- Bureaucracy</li> </ul>
<b>Affordability</b>	<ul style="list-style-type: none"> <li>- Make care affordable</li> </ul>	<ul style="list-style-type: none"> <li>- Cost sharing, free care, exemptions</li> </ul>	<ul style="list-style-type: none"> <li>- Limited resources for governments and patients</li> </ul>

## Planning template – IDF Africa Region and WHO AFRO Workshop Nairobi, Kenya, 2-3 March 2006

Objectives	Strategy	Actions	Barriers
<p><b>Monitoring quality of care</b></p>	<ul style="list-style-type: none"> <li>- Ensure quality care is available to patients</li> </ul>	<ul style="list-style-type: none"> <li>- Monitoring by the Secondary health level of the Primary health level</li> <li>- Monitoring by the Tertiary health level of the Secondary health level</li> <li>- Use of data to measure quality</li> </ul>	<ul style="list-style-type: none"> <li>- Limited resources (funds and human)</li> </ul>
<p><b>Primary prevention</b></p>	<ul style="list-style-type: none"> <li>- Increase awareness of healthy diet and exercise</li> </ul>	<ul style="list-style-type: none"> <li>- Education using mass media</li> <li>- Incorporate NCD in school curriculum</li> </ul>	<ul style="list-style-type: none"> <li>- Costs</li> <li>- Lack of cooperation</li> <li>- Conflict of interest/lack of awareness on magnitude of the problem</li> </ul>
	<ul style="list-style-type: none"> <li>- Screening for risk factors</li> </ul>	<ul style="list-style-type: none"> <li>- Screening</li> </ul>	<ul style="list-style-type: none"> <li>- Costs</li> <li>- Fear</li> <li>- Ignorance</li> </ul>
	<ul style="list-style-type: none"> <li>- Legislation</li> </ul>	<ul style="list-style-type: none"> <li>- Lobbying</li> <li>- Drafting of legislation</li> </ul>	<ul style="list-style-type: none"> <li>- Conflict of interest</li> <li>- Difficult to implement legislation</li> </ul>
<p><b>Secondary prevention</b></p>	<ul style="list-style-type: none"> <li>- Capacity building</li> </ul>	<ul style="list-style-type: none"> <li>- Train personnel</li> <li>- Equip facilities</li> <li>- Resource mobilization</li> </ul>	<ul style="list-style-type: none"> <li>- Cost</li> <li>- Brain drain</li> </ul>
	<ul style="list-style-type: none"> <li>- Patient empowerment</li> </ul>	<ul style="list-style-type: none"> <li>- Patient education</li> </ul>	<ul style="list-style-type: none"> <li>- Costs</li> <li>- Inadequate knowledge</li> <li>- Beliefs</li> </ul>

## Planning template – IDF Africa Region and WHO AFRO Workshop Nairobi, Kenya, 2-3 March 2006

Objectives	Strategy	Actions	Barriers
<b>Tertiary prevention</b>	<ul style="list-style-type: none"> <li>- Optimal care               <ul style="list-style-type: none"> <li>- Good blood glucose control</li> <li>- Availability, accessibility of equipment and supplies</li> <li>- Screening for complications</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Training personnel</li> <li>- Equip facilities</li> <li>- Resource mobilisation</li> </ul>	<ul style="list-style-type: none"> <li>- Shortage of skilled personnel</li> <li>- Costs</li> <li>- Retention of trained personnel</li> </ul>

# Appendix 2

## Planning template – IDF Africa Region and WHO AFRO Workshop Bamako, Mail. June 2006

Objectives	Strategy	Actions	Barriers
<b>Develop champions at the following levels:</b> <ul style="list-style-type: none"> <li>- Political</li> <li>- Technical</li> <li>- Associations</li> </ul>	<ul style="list-style-type: none"> <li>- Develop a national plan</li> </ul>	<ul style="list-style-type: none"> <li>- Involve all actors in the development of this document</li> </ul>	<ul style="list-style-type: none"> <li>- Financial</li> <li>- Interest in diabetes</li> <li>- Competing interests</li> <li>- Lack of resources</li> </ul>
<b>Increase awareness of diabetes</b>	<ul style="list-style-type: none"> <li>- Have an increase in knowledge of what diabetes is</li> </ul>	<ul style="list-style-type: none"> <li>- Sensitisation and information Activities for World Diabetes Day</li> <li>- Meetings and discussions about diabetes</li> <li>- Decentralisation of national associations</li> <li>- Advocacy with government</li> </ul>	
<b>Improve diabetes care</b>	<ul style="list-style-type: none"> <li>- Improve the health system for diabetes care</li> </ul>	<ul style="list-style-type: none"> <li>- Development and implementation of a national diabetes programme</li> <li>- Reorganise health services for adequate care for people with diabetes</li> <li>- Availability of medication and insulin</li> <li>- Decentralisation of care to secondary level</li> </ul>	

# Planning template – IDF Africa Region and WHO AFRO Workshop

## Bamako, Mail, June 2006

Objectives	Strategy	Actions	Barriers
<b>Improve data collection</b>	<ul style="list-style-type: none"> <li>- Improve data collection</li> </ul>	<ul style="list-style-type: none"> <li>- Develop patient files</li> <li>- Develop registers</li> <li>- Monthly reporting systems</li> <li>- Organise data collection and reporting at a national level</li> </ul>	
<b>State involvement</b>	<ul style="list-style-type: none"> <li>- Develop a national political strategy</li> </ul>	<ul style="list-style-type: none"> <li>- Advocacy with the government</li> <li>- Remove taxes and explore possibility of subsidies on medication, consumables</li> <li>- Improve stock management</li> <li>- Development of management systems for diabetes care</li> <li>- Reduce regional disparities</li> <li>- Training</li> <li>- Collaboration between different sectors of the government</li> </ul>	<ul style="list-style-type: none"> <li>- Poverty</li> <li>- Lack of resources (patient and health system)</li> <li>- Cost of medicines, testing, consultation, complications</li> <li>- Unreliable supply networks</li> <li>- Bureaucracy</li> <li>- Some medications are not on essential drug lists</li> <li>- Lack of medications</li> <li>- Inequity in distribution of medication, human resources, healthcare infrastructure</li> <li>- Lack of political will</li> <li>- War and political instability</li> <li>- Lack of communication between facilities</li> <li>- Charlatans and parallel care systems</li> </ul>
<b>Involvement of communities and civil society</b>	<ul style="list-style-type: none"> <li>- Develop diabetes associations and NGOs involved in diabetes care</li> </ul>	<ul style="list-style-type: none"> <li>- Advocacy at all levels</li> <li>- Pressure groups to develop programmes and get resources</li> <li>- Presence in all areas of the country</li> <li>- Financial support with regards to subsidies</li> <li>- Use existing channels of communication</li> </ul>	

## Planning template – IDF Africa Region and WHO AFRO Workshop Bamako, Mali, June 2006

Objectives	Strategy	Actions	Barriers
Healthcare workers	<ul style="list-style-type: none"> <li>- Training of healthcare workers</li> </ul>	<ul style="list-style-type: none"> <li>- Training with regards to:               <ul style="list-style-type: none"> <li>- Rational prescribing</li> <li>- Training paramedical staff</li> </ul> </li> <li>- Emphasise paramedical activities</li> <li>- Harmonisation of public and private sectors</li> </ul>	
Private sector and pharmaceutical companies	<ul style="list-style-type: none"> <li>- Involve the private sector</li> </ul>	<ul style="list-style-type: none"> <li>- Use the private sector as sponsors</li> <li>- Discussions to lessen profit margins</li> <li>- Support for training</li> </ul>	
Initial training	<ul style="list-style-type: none"> <li>- Improve initial medical and paramedical training</li> </ul>	<ul style="list-style-type: none"> <li>- Increase the time spent on diabetes training</li> <li>- Sensitisation to different aspects of diabetes care</li> <li>- Train specialists</li> <li>- Develop short training courses with diplomas</li> <li>- Training for dieticians and podiatrists</li> </ul>	

# Planning template – IDF Africa Region and WHO AFRO Workshop

Bamako, Mail, June 2006

Objectives	Strategy	Actions	Barriers
<p><b>Continuous education</b></p>	<ul style="list-style-type: none"> <li>- Continual training for all staff</li> </ul>	<ul style="list-style-type: none"> <li>- Include personnel already working in the training schemes</li> <li>- Insure regular training</li> <li>- Adapt education material to local context</li> <li>- Get access to medical publications</li> <li>- Develop local material</li> <li>- Telemedicine</li> <li>- Develop local, national and regional scientific panels</li> </ul>	
<p><b>Develop a comprehensive prevention programme for diabetes and its complications</b></p>	<ul style="list-style-type: none"> <li>- Review the tools needed to develop a prevention programme for diabetes and its complications</li> <li>- Determine the barriers that need to be removed to implement a prevention programme</li> <li>- Determine which strategies will enable a successful prevention programme to be put in place</li> </ul>	<ul style="list-style-type: none"> <li>- Training of human resources</li> <li>- Organisation of health system with referral system</li> <li>- IEC activities and sensitisation of population</li> <li>- Study of Knowledge, Attitudes and Practices with regards to diabetes</li> <li>- Training of trainers</li> <li>- Development of standardised training protocols adapted to the reality of each country</li> </ul>	<ul style="list-style-type: none"> <li>- Political instability</li> <li>- Restricted budgets</li> <li>- Political instability</li> <li>- Lack of knowledge about diabetes in institutions, with healthcare personnel and the community</li> <li>- Lack of complete studies</li> <li>- Lack of trained staff</li> <li>- Lack of facilities</li> </ul>



