

WORLD HEART FEDERATION ROADMAP FOR THE PREVENTION OF CVD AMONG PEOPLE LIVING WITH DIABETES

**Informing health systems approaches to CVD by
prioritizing practical, proven, cost-effective action**



CVD & DIABETES



1 IN 11

Adults are affected by type 2 diabetes worldwide



Type 2 diabetes mellitus is a major global health threat. It affects 425 million people with the overall figure predicted to rise to 629 million by 2045, and accounts for approximately 90% of all patients with diabetes. All of those living with diabetes are at heightened risk of CVD making the prevention of CVD onset a major priority.

ABOUT CVD AND TYPE 2 DIABETES MELLITUS

Diabetes is a metabolic disorder characterized by high blood sugar, insulin resistance and relative lack of insulin. Long-term complications from high blood sugar include heart disease, strokes and diabetic retinopathy, which can result in blindness, kidney failure and poor blood flow in the limbs that may lead to amputations. Pathophysiologically, diabetes is a vascular disease.

Those living with type 2 diabetes mellitus are twice as likely to die from heart disease and stroke compared to patients without diabetes. It is estimated that globally, as many as 212.4 million people or half of all people aged 20-79 years with diabetes are unaware of their disease, and these people are all at increased risk of CVD.

All of this results in an urgent need to prevent CVD in those with diabetes, requiring careful attention to CVD risk factors such as tobacco use, hypertension and blood lipids.

THE MAGNITUDE OF THE PROBLEM

In 2015, the global economic burden of type 2 diabetes mellitus was estimated to be \$1.3 trillion, or 1.8% of the global GDP; and it is estimated that this burden will increase to \$2.1 - \$2.5 trillion by 2030. Twelve percent of global health expenditure is spent on diabetes (\$727 billion).

Despite the high prevalence and burden of diabetes worldwide, diagnosis and treatment continues to fall behind required levels.

CVD PREVENTION IN THOSE LIVING WITH DIABETES



Exercise regularly
Maintain a heart healthy diet
Don't smoke
Keep an eye on your body weight



Reduce your blood pressure
Control your diabetes
Manage your cholesterol
Take heart protective medications as prescribed



PATIENT STORY: HOW I WAS DIAGNOSED WITH HEART DISEASE BY LUCK AND HAD A TRIPLE BYPASS SURGERY

“ Twenty years ago I was diagnosed with type 2 diabetes and was told that I would have to follow precautions and carefully look after my health. I was a happily married retired bookmaker, with three children and five grandchildren. Other than having diabetes I felt fit, happy and healthy.

After picking up a leaflet in my doctor's surgery, I decided to have my heart checked. My test revealed a possible problem and I was sent for an angiogram, which showed five blockages – three in the main arteries to the heart and two minor blockages. I was told the problem was serious and that I needed surgery.

Just a few months later, I was recovering from a triple bypass surgery. I am grateful that my problem was picked up before I had symptoms and it became life threatening.

I hope my story will encourage people to monitor their heart health to avoid potentially serious problems, especially for people with diabetes as they often fall into a higher risk category for developing heart disease. I was not aware of this increased risk until I was diagnosed with heart disease one year ago.



DIABETES & CVD

A GLOBAL ANALYSIS

THE SURVEY



425 million people worldwide have diabetes

People with diabetes are 2 to 3 times more likely to have CVD

50% are unaware of their disease

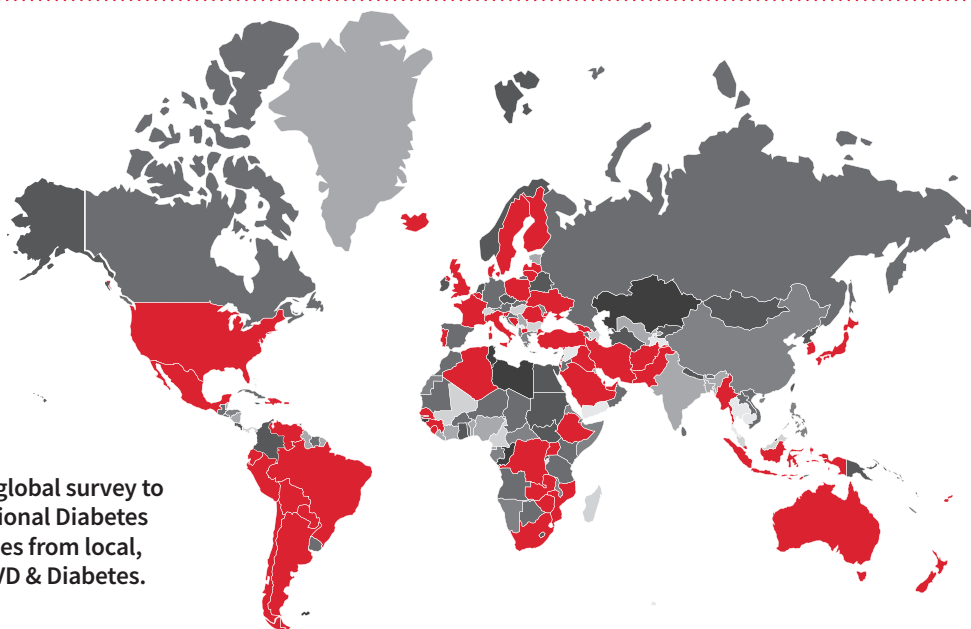
84% of people aged 65 or older with diabetes die from heart disease and stroke

161 

PARTICIPANTS

62 

COUNTRIES



These numbers are the result of a global survey to World Heart Federation & International Diabetes Federation members with responses from local, regional and national experts in CVD & Diabetes.

61%

do not have community or hospital programmes on the risk of CVD



do not have standardised screening

57%



do not have relevant clinical guidelines or protocols for detection

29%

71%

have a waiting time of over one month to see a specialist in the public health system



25%

do not have follow up treatment programmes



reported that patients do not have access to existing follow up treatment programmes

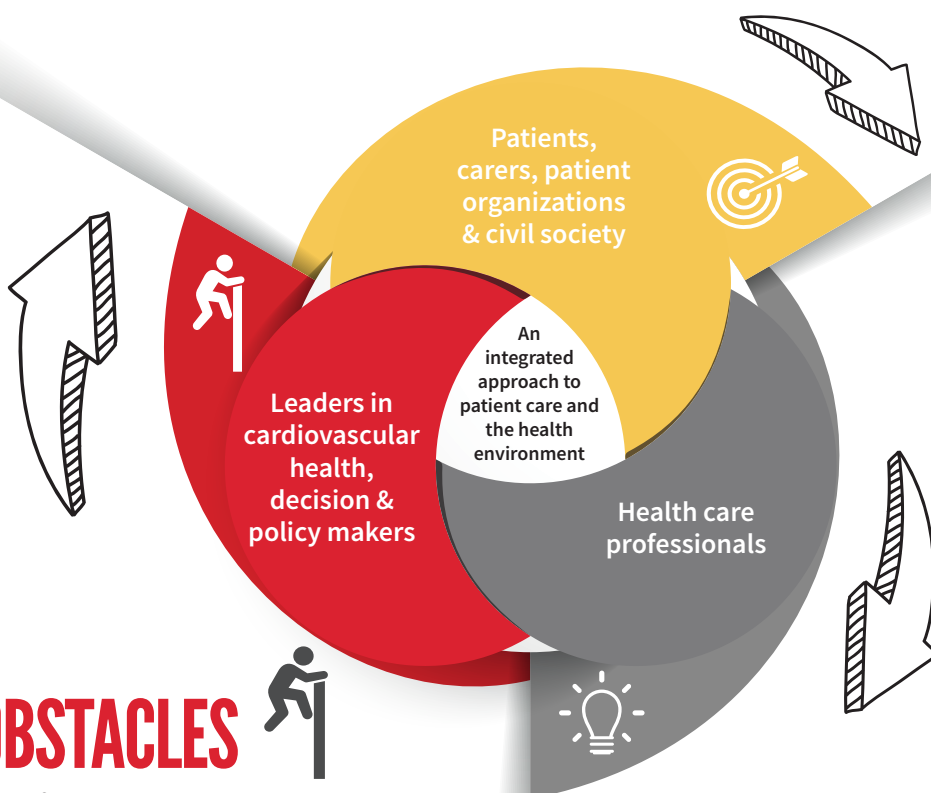
44%

POTENTIAL SOLUTIONS



to overcome obstacles include:

- Implement awareness programmes focused on the link between CVD and diabetes
- Make the public aware of the benefits of healthy lifestyles supported by national policies and campaigns
- Effectively recommend and disseminate available evidence to guide screening practice
- Screen at-risk populations by blood tests following best reported practice within clinical guidelines
- Ensure healthcare teams work together across primary, community and specialist care settings
- Educate endocrinologists and non-endocrinologists (including GPs, nurses etc) on each other's role and treatment options



OBSTACLES



to effectively manage CVD and type 2 diabetes mellitus include:

- Lack of awareness of the increased CVD risk among those with diabetes
- Difficulty of changing attitudes and behaviours in regard to healthy lifestyle
- Lack of healthcare worker adherence to clinical practice guidelines
- Lack of an integrated care approach to screening
- Lack of communication between endocrinologists/diabetologists and non- endocrinologists (eg internists and cardiologists)
- Evidence practice gaps in treatment of diabetes and CVD
- The healthcare system is not equipped to deal with chronic diseases
- Lack of access to essential medicines for CVD and diabetes

RECOMMENDED BEST PRACTICES



for CVD prevention, diagnosis and management in those living with diabetes

- Develop and implement CVD prevention strategies focused on lifestyle and risk factor management
- Screen at-risk individuals for dysglycaemia - type 2 diabetes mellitus plus impaired glucose tolerance [IGT] - which increases the risk of cardiovascular complications
- Improve diagnosis rates for type 2 diabetes
- Treat those living with type 2 diabetes and CVD for both conditions
- Monitor and follow up CVD and diabetes patients to maintain quality of life

TAKING ACTION AGAINST CVD & DIABETES

A global framework for regional and national action, WHF Roadmaps are now being used to convene country-specific Roundtables through WHF and our Members. They are gathering relevant stakeholders to identify obstacles and potential solutions that are relevant to their settings, and produce national plans.

IMPROVING EDUCATION IN THE USA AND ACCESS TO CARE IN THE PHILIPPINES

The US currently ranks 3rd highest in adult diabetes worldwide. Despite the fact that there are specific risk factors proven to increase the likelihood of developing CVD among those living with type 2 diabetes mellitus, there are few examples of programmes that have directed ample resources towards prevention.

The Montana Diabetes Prevention Programme (DPP) delivers interventions for healthy lifestyle changes to those at risk of developing CVD and diabetes through awareness, education and intervention initiatives. Publications from the Montana DPP have shown the effectiveness of lifestyle intervention programmes, of a telehealth model to deliver prevention initiatives to rural communities, and of setting lifestyle goals with large and small groups.

Meanwhile in the **Philippines, a joint effort with the World Diabetes Foundation and primary healthcare facilities** had focused on improving access to multidisciplinary diabetes and CVD care in the Davao and Western Visayas regions; the only large-scale effort to locate integrated services for CVD and diabetes prevention and screening within existing primary healthcare systems.

This project involved specific interventions, including establishing registries, records and screening forms for healthcare professionals across settings and coordinated training programmes delivered by specialist teams. Results of the programme reported the local screening of 57,242 people for diabetes and hypertension at primary care clinics, results of which were registered in a large database. Evidence-based examples of the benefits of different models of integrated care, across settings as well as across specialty areas, continue to support this model as a best care approach for chronic disease.

“ Roadmaps are scientific documents for translating science into policy. They help all people to get the best science for promoting health, for preventing and controlling disease, and for rehabilitating patients. It is time for ‘Health in All Policies’ worldwide. As not only doctors but also world citizens, we are proud to be part of this World Heart Federation initiative. ”

DANIEL PINIERO

Member of Science Committee,
World Heart Federation

“ WHF Roadmaps provide a global framework to focus the minds of national and local stakeholders on how in-country progress can be achieved in the fight against CVD. By convening at Roundtables, we can kick-start essential action to overcome obstacles and agree tangible solutions for positive change. ”

PROFESSOR ELIJAH OGOLA

Secretary General, Pan-African
Society of Cardiology



WORLD HEART FEDERATION ROADMAPS

Already the world's number one killer, deaths from cardiovascular disease (CVD) are increasing globally. CVD and related conditions can be detected early and treated cost-effectively, preventing costly hospitalizations and death. But this requires coordinated national policy and health systems responses built around evidence-based strategies.

Health resources are limited and so cost-effective interventions for the prevention, detection and management of CVD must be prioritized in order to plan effective health systems responses.



WHAT ARE ROADMAPS?

WHF Roadmaps are a global framework that are adapted and used at national or regional level.

THEIR PURPOSE IS TO:

1. Summarize current CVD recommendations that are proven, practical and cost effective
2. Highlight obstacles to implementing these recommendations
3. Propose potential solutions for overcoming these obstacles
4. Provide tools and strategies to adapt solutions to local needs

HOW DO THEY WORK?

WHF Roadmaps offer a global framework, tools and solutions that are then used and adapted, through stakeholder collaboration, to meet the specific needs of individual regions and nations.

This requires:

- A situation analysis of the current health system based on tools such as WHF CVD Scorecards

- Roundtables with multiple stakeholders to discuss obstacles, solutions and appropriate strategies
- A plan to implement and evaluate the proposed strategies

WHO ARE THEY FOR?

WHF Roadmaps empower our Members, including CVD foundations, societies and patient associations, to lead country specific, action-oriented initiatives, including Roundtables.

These involve diverse stakeholders, such as:

- Governments and policy makers
- NGOs, health activists and advocates
- Healthcare professionals
- Corporate entities
- Academic and research institutions
- Patients and patient groups

WHY ARE THEY IMPORTANT?

To trigger effective action that can measurably reduce premature deaths and the associated global economic burden caused by CVD.

TO DOWNLOAD THE FULL ROADMAP PLEASE VISIT - CVDROADMAPS.ORG

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