

# **Protecting our Seniors, Indigenous Peoples and Sustaining Heart-healthy Research Excellence in Canada**

**Submission to the:**

**House of Commons Standing Committee on Finance**

**August 1, 2014**

## About the Heart and Stroke Foundation

The Heart and Stroke Foundation (HSF) is a national volunteer-based charity led and supported by more than 140,000 volunteers and close to two million donors. The aim of the HSF is to create healthy lives free of heart disease and stroke, through the advancement of research and its application, the promotion of healthy living and advocacy. The HSF enjoys a productive working relationship with the federal government, recently partnering on a number of initiatives, including defibrillators in hockey arenas, the Recreational Infrastructure Canada Fund and a variety of tobacco control initiatives.

### Executive Summary

The HSF is eager to partner with the federal government to help achieve the following two priorities identified by the Finance Committee for its pre-budget consultations: 1) supporting families and helping vulnerable Canadians by focusing on health, education and training; and 2) increasing the competitiveness of Canadian businesses through research, development, innovation and commercialization. The HSF aims to work with the federal government in the following three areas that directly support the above priorities:

#### Increasing cardiovascular research

Over the last 60 years, the HSF has invested almost \$1.4 billion in heart and stroke research. Although we have made great strides in advancing cardiovascular (CV) research, Canada is falling behind in this research area and further investment is critical. We are asking the federal government to match our initial investment of \$30 million per annum for CV research funding. This funding will be managed in partnership with the Canadian Institutes of Health Research (CIHR). As a widely recognized and trusted national health charity, the HSF has a proven track record of effective health research leadership and a longstanding and strong partnership with CIHR.

#### Improving Indigenous peoples' cardiovascular health

Indigenous peoples<sup>1</sup> have poor CV health compared with the rest of the Canadian population. They are twice as likely to develop cardiovascular disease (CVD) and have a higher proportion of CVD risk factors. Poverty is high among Indigenous peoples, and we know that lower income is associated with a higher prevalence of CVD and risk factors. We need to mobilize the voluntary sector, including the HSF, the Canadian Diabetes Association and the YMCA, to work in partnership with Indigenous people's organizations and communities to improve the health of Indigenous peoples. We are asking the federal government to commit to invest \$50 million per annum to support Indigenous people's health initiatives.

#### Protecting our seniors - preventing dementia

Dementia is on the rise in Canada. In 2011, 747,000 Canadians were living with a cognitive impairment. Dementia is intrinsically linked to vascular health, sharing major risk factors and social determinants of health, including mid-life hypertension, high cholesterol, mid-life obesity, physical inactivity, smoking, diabetes and low educational attainment. Also, 25-50% of patients with heart failure have cognitive impairment and "silent strokes", which are a major cause of vascular dementia. Consequently, there is much we know about reducing the risk of dementia. The HSF, working with the Alzheimer's Society of Canada, the Canadian Diabetes Association, the YMCA of Canada and other key players can, with the support of the federal government, launch a program to

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<sup>1</sup> Indigenous peoples refers to Aboriginal, First Nations, Inuit & Metis.

reduce significantly the incidence of dementia. We are requesting that the federal government invest \$20 million per annum to support dementia prevention initiatives.

The HSF and its partners look forward to collaborating with the federal government to help vulnerable Canadians, and increase the competitiveness, efficiency and sustainability of Canada's health sector by focusing on research, development, and innovation.

## 1) *Increasing Cardiovascular Research*

Heart disease and stroke are the leading cause of hospitalizations and prescription drug use, and the second leading cause of death and economic costs (\$20.9 billion annually). The number of individuals surviving heart attacks and other acute heart conditions is increasing. The risk of developing atrial fibrillation (AF), the most common irregular heart rhythm, increases with age, as does other risk factors such as diabetes and high blood pressure. Individuals with AF have a risk of stroke that is three to five times greater than those without. With Canada's aging population, the burden of heart disease (specifically heart failure and atrial fibrillation) stroke and vascular dementia will increase.

### **Recommendation**

***That the federal government match HSF-led cardiovascular disease research in the amount of \$30 million per annum by augmenting support for partnerships between the Canadian Institutes of Health Research (CIHR) and the HSF. This will help commercialize and translate research results into new treatments and technologies that will benefit Canadians suffering from heart disease and stroke.***

### **Impact**

Canada is falling behind in high impact cardiovascular research and an investment is now critical. In particular, the HSF's research investments are under increasing pressure due to the diminished growth of charitable giving in Canada. As well, CVD research funding at CIHR has been declining because fewer young researchers are applying to CIHR CVD research opportunities. In order to reverse the decline, we need more investment to encourage, attract and retain young researchers. When the HSF has invested in young researchers we have attained retention rates of up to 60%.

By committing to match HSF investments with \$30 million in research funding annually, the federal government will improve the health of Canadians by reducing the impact of vascular disease and address key health risk factors that are common to many conditions, including unhealthy weights, high blood pressure, unhealthy eating, and physical inactivity.

Approximately 70% of the HSF's grant funding has been invested directly into the creation of high value jobs to conduct and support research. This investment therefore constitutes a great economic stimulus opportunity. The return on investment of this type of initiative is estimated at 21-39% per annum in perpetuity, through improved health outcomes, reduced treatment costs, and economic gains. It will help Canadian researchers commercialize and translate their research into new treatments and technologies, and boost high-value economic activity.

These funds will support Canadian heart disease and stroke research at universities and research hospitals across the country. Among other initiatives, it will augment Canada's Strategy for Patient-Oriented Research (SPOR); Pathways to Equity for Aboriginal Peoples; and, the International Collaborative Research Strategy for Alzheimer's Disease. This funding will build on Canada's strengths, support the next generation of health researchers, and ensure Canada remains a world leader in this important area of growing medical need. HSF looks forward to continuing to work with CIHR to maximize the impact of CVD research.

## 2) *Improving Indigenous Peoples' Cardiovascular Health*

Heart disease, stroke and their risk factors are threats for all Canadians but are particularly serious for Canada's Indigenous peoples, who are twice as likely to develop CVD compared to the general Canadian population.

Indigenous peoples have much higher rates of major CVD risk factors, such as physical inactivity, smoking, unhealthy weights, high blood pressure and diabetes, than the general population. Low income is also associated with a higher prevalence of CVD and risk factors. Compared to the general population, the average annual income among Indigenous peoples is much lower. In fact, 40% of Indigenous peoples' children live in poverty. This greatly increases their risk of developing CVD.

## **Recommendation**

***That the federal government invest \$50 million per annum for Indigenous peoples health initiatives, directed by Indigenous peoples organizations and communities, in partnership with the HSF, the Canadian Diabetes Association and the YMCA of Canada.***

## **Impact**

To improve the health and quality of life of Indigenous peoples in Canada, more efforts are needed to help close the gap in their CV health and to ensure that Indigenous peoples children have a healthy start in life. The HSF, working with its partners the Canadian Diabetes Association and the YMCA, wants to help achieve this goal by engaging Indigenous peoples organizations and communities to implement initiatives that will help address the root causes of CVD.

Our vision is to build on the experience we have working with Indigenous peoples communities across the country, to develop the skills and knowledge of the communities to address their health concerns. Our work to date has focused on four areas: improving the food supply, management of hypertension, Automated External Defibrillator (AED) placements and ensuring healthy children. Our approach, working with Canadian Diabetes Association and the YMCA will entail reaching out to, and partnering with leaders in each community to build local capacity.

Healthy eating is a major factor in decreasing CVD risk. We would share our success in promoting sustainable food production in Indigenous peoples' communities, including the introduction of community gardens and greenhouses.

We also need to ensure that Indigenous peoples' communities have the proper training and equipment to deal with sudden cardiac arrest. We need to build on the government's important investment to provide AEDs in hockey arenas and ensure that all Indigenous peoples' communities have access to at least one AED.

Further, as appropriate, the HSF's experience with the management of hypertension and heart healthy programs for children can be expanded.

## **3) *Protecting our Seniors – Preventing Dementia***

In 2011, 747,000 Canadians were living with cognitive impairment, including dementia. This means that 14.9% of Canadians aged 65 and older have cognitive impairment. If the status quo is maintained, 1.4 million Canadians will have a cognitive impairment by 2031.

Dementia is intrinsically linked to vascular health, as evidence suggests that 25-50% of patients with heart failure have a cognitive impairment. Also, what are known as "silent strokes" are a major cause of vascular dementia. The risk of developing these diseases can be minimized by adopting a

healthy lifestyle, which includes being physically active, eating right, challenging your brain and staying social.

## **Recommendation**

***That the federal government invest \$20 million per annum for Prevention of Dementia Initiatives.***

## **Impact**

According to the Alzheimer's Society of Canada, dementia is on the rise in our country. Seniors aged 65 and older will be the fastest growing age group over the next 25 years, and are especially vulnerable to the risk of developing cognitive impairment, including dementia and Alzheimer's disease. We commend the federal government for investing in dementia research through the Canadian Consortium on Neurodegeneration in Aging. This research is critical. At the same time there is much we know and can do now to reduce the incidence of dementia.

In partnership with the Alzheimer's Society of Canada, the Canadian Diabetes Association and the YMCA, the HSF proposes to collaborate on a single comprehensive program that will significantly reduce the incidence of dementia. For example, one key contributor to dementia is hypertension and we know a great deal about how it can be controlled. Through our partnerships, this investment would support programs to:

- a) Establish a public awareness initiative to increase the number of Canadians that understand how to reduce their risk of vascular dementia and know about their blood pressure and what they can do to control it.
- b) Develop a national walking network, consisting of a network of walking clubs, clinics and programs. Building on existing events such as the Alzheimer's Society's "Walk for Memories", this would also include establishing an annual national walking week, flagship walking events, walking tools and resources and a comprehensive public awareness campaign focusing on walking.
- c) Improve nutrition by increasing consumption of fruits and vegetables and supporting the development of a comprehensive nutrient database that will promote nutrition literacy and enable Canadians to make informed choices when purchasing packaged foods.
- d) Increase capacity for self-management among Canadians.

## **Summary**

There is an important opportunity for the federal government to address the health of Canadians and support research and innovation by working in partnership with the voluntary sector. We have identified three critical areas for investment: research, the health of Indigenous peoples and the prevention of vascular dementia. In collaboration with our partners and with the commitment of the federal government, we can successfully address the above three areas and the significant fiscal and human burden of heart disease and stroke for years to come.