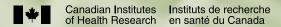


# CIHR Three-Year Implementation Plan and Progress Report 2010–13

Health Research Roadmap: Creating innovative research for better health and health care





### **Canadian Institutes of Health Research**

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### Contents

President's Message	2
About CIHR	3

- 1 Invest in World-Class Research......4
  - Train, retain and sustain outstanding health researchers
  - Select and sustain research excellence
  - Promote interdisciplinary and international innovation

- - Improve focus, coherence and impact from CIHR's strategic investments
  - Build strategies and initiatives that address health and health system priorities

- Accelerate the Capture of Health and Economic Benefits of Health Research ............10
  - Reap the socioeconomic benefits from research through KT and partnerships
  - Enhance the application of research and its evaluation
- - Advance organizational excellence and ensure transparency and accountability
  - Evaluate the overall success of CIHR
  - Foster a culture of ethical research by promoting and assisting the discussion and application of ethical principles to health research
  - Assess progress and impact by demonstrating the impacts of CIHR investments

### President's Message



As highlighted in CIHR's 2009-14 Strategic Plan, *Health Reseach Roadmap: Creating innovative research for better health and health care*, we are committed to providing Canada's health research community with a clear overview of strategies and priorities that will be acted upon. This Implementation Plan highlights activities CIHR will undertake over the next three years to implement the Strategic Plan. It also outlines some of the key results achieved over the course of the 2009-10 fiscal year. In subsequent years, the results achieved will reflect the performance measures identified in this document.

This Implementation Plan is CIHR's first and is therefore a prototype. A refresh of this Implementation Plan will be developed on an annual basis. Each year the plan will bring focus to short-term actions and deliverables and will provide updates on how each strategic direction has been addressed by highlighting measurable progress for greater transparency and accountability, essential for CIHR to maintain its status as a leading-edge organization.

The successful development of this first Implementation Plan is a result of the ongoing support received from CIHR staff and each of our 13 Institutes. Numerous internal consultations took place to ensure that the appropriate initiatives and activities are accurately reported in the following pages so that this document becomes a clear planning and progress report.

I thank all those involved in the development of this first Implementation Plan and I am looking forward to your feedback and support.

Alain Beaudet, MD, PhD

President

Canadian Institutes of Health Research

### About CIHR

#### **Mandate**

CIHR's mandate is to "excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health-care system." (Bill C-13, April 13, 2000)

### Vision

CIHR's vision is to position Canada as a world leader in the creation and use of health research knowledge that benefits Canadians and the global community.

### Achieving the mandate and vision

Established in 2000, CIHR promotes a solutions-focused, multidisciplinary and collaborative approach to health research. Its unique structure brings together researchers from across disciplinary and geographic boundaries through its 13 Institutes. Currently, CIHR supports more than 13,600 health researchers and trainees in universities, teaching hospitals and other health organizations and research centres across the country. The agency supports health research in a transparent process that meets the highest international standards of excellence and ethics in four research areas: biomedical; clinical; health systems and services; and the social, cultural and environmental factors that affect the health of populations.

### **Institutes**

CIHR's 13 Institutes share responsibility for achieving the fundamental objective of CIHR and have their own distinct strategic plans that are aligned with the overarching directions, mandate and vision of CIHR. The Institutes promote and build upon Canada's firm foundation of research excellence, engage the research community and encourage interdisciplinary, integrative health research and knowledge translation. Through their Scientific Directors and Institute Advisory Boards and under the oversight and guidance of CIHR's Governing Council, the Institutes work with stakeholders to forge a health research agenda across disciplines, sectors and regions that embraces scientific opportunity and reflects the emerging health needs of Canadians, the evolution of the health-care system and the information needs of health policy decision makers.



### 13 Institutes

Aboriginal Peoples' Health
Aging
Cancer Research
Circulatory and Respiratory Health
Gender and Health
Genetics
Health Services and Policy Research
Human Development, Child and Youth Health
Infection and Immunity
Musculoskeletal Health and Arthritis
Neurosciences, Mental Health and Addiction
Nutrition, Metabolism and Diabetes
Population and Public Health

# Invest in World-Class Research

### **GOAL 1:** Train, retain and sustain outstanding health researchers

#### **Five-Year Objectives**

- Attract and retain the best health research trainees
- Attract and retain the best postdoctoral fellows
- Attract and retain the best early career researchers
- Break down professional and sectoral barriers in health research and prepare young researchers for various labour markets

#### **Performance Measures**

- Number and type of trainees supported by CIHR
- Number and type of postdoctoral fellows supported
- Number and type of early career researchers supported
- Diversity of academic and professional backgrounds of trainees (graduate students), postdoctoral fellows and early career researchers supported
- Diversity of post-training academic and non-academic career paths of CIHR-supported trainees

#### **Actions**

- Conduct a scan of CIHR support for trainees
- Design and implement reforms to enhance CIHR support for trainees
- Implement the prestigious postdoctoral fellowship program announced in Budget 2010
- Design and implement reforms to enhance support for early career researchers
- Harmonize Vanier scholarships program delivery with NSERC and SSHRC



- ✓ Developed a strategy to support training graduate students abroad
- ✓ Initiated environmental scan of support for trainees in Canada
- ✓ Launched revised Science to Business training program

# Invest in World-Class Research

### **GOAL 2:** Select and sustain research excellence

Five-Year Objectives	Performance Measures	Actions	2009-10	2010-11	2011-12	2012-13
• Strengthen peer review	<ul> <li>Number and type of experts belonging to College of Reviewers</li> <li>Number and type of reviewers participating in panels</li> </ul>	<ul> <li>Establish a College of Reviewers</li> <li>Develop and implement a training and evaluation process for peer reviewers</li> <li>Make enhancements to peer review processes</li> </ul>			Ξ	
Improve funding mechanisms to support health research	Scope and excellence of research supported	<ul> <li>Assess current suite of funding mechanisms and identify best international practices</li> <li>Design and implement reforms to research funding mechanisms ensuring an appropriate balance between sustainability and creativity</li> </ul>				

- ✓ Redesigned CIHR's peer review website
- Consolidated peer review recruitment functions across CIHR
- ✓ Standardized peer review recruitment processes
- ✓ Integrated the Randomized Controlled Trials funding tool with the Open Operating Grants Program
- ✓ Initiated an evaluation of the Open Operating Grants Program
- Initiated planning to transfer integrated knowledge translation programs into the open suite of programs

# Invest in World-Class Research

### **GOAL 3:** Promote interdisciplinary and international innovation

### **Five-Year Objectives**

- Attract and retain the best international scholars and experts to Canada
- Increase number of international partners investing with CIHR

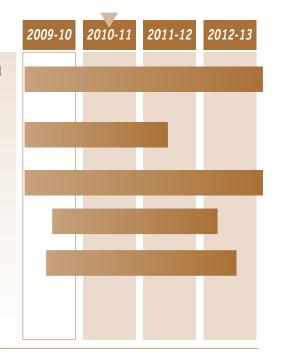
 Facilitate health research capacity building in low- and middle-income countries

#### **Performance Measures**

- Number and quality of international researchers recruited
- Amounts invested by CIHR and leveraged in international partnerships
- Amounts and type of investments by CIHR in building research capacity in low- and middle-income countries

#### Actions

- Review and reform funding programs to attract and retain international researchers
- Develop and implement a new CIHR international strategy
- Foster key international partnerships
- Lead the development of international health research consortia
- Develop and implement a global health research strategy



- ✓ Launched new Chairs of Excellence in Research competition
- ✓ Initiated development of CIHR's International Strategy
- ✓ Funded research projects for the Canada-California cancer stem cell competition
- ✓ Launched Canada-France-Quebec Alzheimer's initiative
- ✓ Established a new memorandum of understanding (MOU) with the Bill and Melinda Gates Foundation
- Signed MOU as founding member of Global Alliance on Chronic Diseases (GACD)

- ✓ Launched funding opportunity with the Indian Council of Medical Research (ICMR) on childhood obesity
- ✓ Funded six interdisciplinary projects with Chinese Ministry of Science and Technology (MOST)
- ✓ Launched several programs and co-funded research with the Academy of Finland (AF)
- ✓ Developed CIHR principles for global health research

GOAL 1: Improve focus, coherence and impact from CIHR's strategic investments

### **Five-Year Objectives**

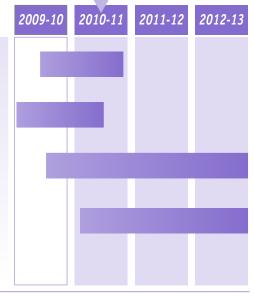
- Establish a comprehensive process for selecting strategic priorities
- Identify and launch strategic initiatives with clear and measurable objectives that are aligned to strategic priorities and designed to achieve the desired impact

### **Performance Measures**

 Highly focused strategic initiatives that are aligned with Roadmap with clear objectives, robust performance indicators and sufficient funding to succeed

#### Actions

- Develop and implement a new strategic investment planning process
- Develop and implement a program design framework
- Identify and launch strategic initiatives
- Monitor and evaluate strategic initiatives



- ✓ Developed and initiated implementation of a program design framework
- ✓ Established a new strategic investment planning process
- Completed environmental scans of each of the five health research priorities identified in Roadmap
- Assessed 60 potential strategic initiatives in terms of alignment, impact and likelihood of success
- Selected 13 initiatives to be further developed and moved to the next phase in the approval process

# 2 Address Health and Health System Research Priorities

GOAL 2: Build strategies and initiatives that address health and health system priorities

#### **Five-Year Objectives**

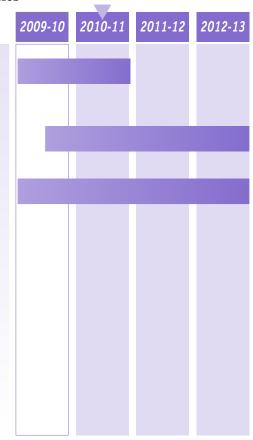
- CIHR will focus its activities on the following five broad priorities:
  - Enhance patient-oriented care and improve clinical results
  - Support a high-quality, accessible and sustainable health-care system
  - Reduce health inequities of Aboriginal peoples and other vulnerable populations
  - Prepare for and respond to existing emerging threats to health
  - Promote health and reduce the burden of chronic disease and mental illness

#### **Performance Measures**

- Number, value and type of partnerships created to advance these priorities
- Funding associated with each priority, including that provided via CIHR's open suite of programs
- Number of publications and their average relative citations and average relative impact factors derived from CIHR funding in each of the priority areas
- Increases in Canada's capacity to conduct health research and exploit its findings
- Number of initiatives helping to improve the health outcomes of Canadians, strengthen the health-care system and develop new or more effective health services and products

#### **Actions**

- In collaboration with partners, researchers and other key stakeholders, develop strategies to address specific priorities that identify key gaps and opportunities and propose solutions
- Launch strategic initiatives to advance knowledge, build capacity and translate knowledge for the benefit of Canadians
- Use CIHR's convening power to engage decision makers and experts on issues of concern to health researchers, institutions, health providers, public policy makers and citizens



### 2009-10 Highlights of Results Achieved

### Enhance patient-oriented care and improve clinical results

- ✓ Developed the Strategy for Patient-Oriented Research (SPOR) and started consultations with stakeholders
- Integrated the Randomized Control Trials funding tool with the Open Operating Grants Program
- ✓ Initiated the development of standard operating procedures for clinical trials, and a model template agreement to facilitate industry-hospital research collaborations
- Completed a study of clinician and non-clinician personnel engaged in this area of research

(Continued)

# Address Health and Health System Research Priorities

GOAL 2: Build strategies and initiatives that address health and health system priorities

### 2009-10 Highlights of Results Achieved

# Support a high-quality, accessible and sustainable health-care system

- Held a summit on primary health care that engaged multiple stakeholders
- ✓ Expanded the successful Partnerships for Health System Improvement, Best Brains and Evidence on Tap programs as core programs
- ✓ Established the Drug Safety and Effectiveness Network office and initiated the launch of several funding opportunities that address research gaps in the post-market use of drugs

# Reduce health inequities of Aboriginal peoples and other vulnerable populations

- ✓ Finalized CIHR's Global Health Strategy to guide how global health considerations should be integrated into CIHR's activities, programs and initiatives
- Initiated work on the development of a northern strategy for CIHR in collaboration with Aboriginal peoples and health researchers active in this domain
- Launched funding opportunities in the area of intervention research to address specific needs of Aboriginals and other vulnerable populations

### Prepare for and respond to existing emerging threats to health

- ✓ Continued to advance HIV/AIDS research, with a strong focus on evaluating community-based initiatives and further our understanding of the interplay of HIV/AIDS with other diseases
- ✓ Initiated several rapid-response funding opportunities to address the H1N1 pandemic and the worldwide shortage of medical isotopes
- Supported a collaboration of Canada's three federal granting councils for multidisciplinary research on Climate Change and Adaptation

## Promote health and reduce the burden of chronic disease and mental illness

- Held a variety of workshops on topics such as: access to quality cancer care; sodium reduction; gender and health
- ✓ In collaboration with partners, launched several funding opportunities on topics such as: late effects of pediatric cancer treatments; physical activity, mobility and health; early origins of mental health and addictions in children
- ✓ Launched the Canadian Longitudinal Study on Aging (CLSA)
- Completed a draft of the International Collaborative Research Study for Alzheimer's disease and concluded the France-Quebec-Canada partnership to fund research on the early diagnosis and treatment of Alzheimer's disease

# 3

### Accelerate the Capture of Health and Economic Benefits of Health Research

### **GOAL 1:** Reap the socioeconomic benefits from research through KT and partnerships

### Five-Year Objectives

- Facilitate and strengthen partnerships between researchers and knowledge users and between CIHR and a variety of organizations to achieve impact
- Support evidence-informed policy making to improve health and the health system at the provincial, territorial and federal levels
- Facilitate innovation and commercialization by creating incentives for health researchers and private sector partners to work together to translate health research findings into improved health products, technologies and tools for Canadians
- Increase citizen engagement and public outreach initiatives

### **Performance Measures**

- Number and quality of integrated knowledge translation applications
- Number of partners participating in workshops and meetings and in funding opportunities
- Number of partners, level of partner investment and partner satisfaction
- Number of CIHR engagements and events with policy makers
- Number and quality of applications

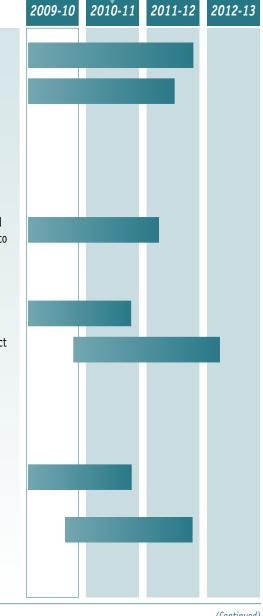
- Number and type of activities engaging citizens and attendance at events
- Number of media citations in both official languages, number of hits on the CIHR website, uptake of social media

#### Actions

- Enhance suite of integrated knowledge translation and other partnered funding mechanisms
- Implement improved partnership practices

- Implement programs to support evidence-informed policy making and increase policy makers' access to high-quality evidence
- Enhance funding mechanisms to support commercialization and industry engagement
- Refresh and implement funding strategies to reflect changing commercialization environment

- Develop and implement tools and resources to increase external participation and uptake in citizen engagement activities
- Develop and implement communication and engagement strategies to elevate CIHR's profile nationally and internationally



(Continued)

# 3

### Accelerate the Capture of Health and Economic Benefits of Health Research

GOAL 1: Reap the socioeconomic benefits from research through KT and partnerships

### 2009-10 Highlights of Results Achieved

### **Partnerships**

- Developed specific CV module for knowledge users
- ✓ Designed a new funding mechanism to support networks of researchers and knowledge users
- ✓ Implemented a number of partnered initiatives including Institute initiatives and Tri-Council programs
- ✓ Developed and initiated implementation of CIHR Partnership Plan, including Partnership Handbook and other tools and resources

### **Evidence-Informed Policy Making**

- ✓ Launched The Best Brains Exchange, Evidence on Tap and the Preventive Healthcare Synthesis Centre
- Introduced educational modules on the CIHR website
- Carried out a variety of Institute-initiated activities with federal and provincial policy makers
- Held a science policy interface workshop with Health Portfolio
- Held a deputy ministers meeting with CIHR officials and Nobel laureates to discuss the research process, science and society

### Commercialization

Revised and promoted commercialization and industry-partnered programs (Proof of Principle, Industry Partnered Collaborative Research)

- ✓ Launched revised Science to Business training program
- ✓ Actively collaborated with stakeholders (e.g. NSERC, ACCT, FPTT meetings)

### Citizen Engagement and Public Outreach

- ✓ Held second Communicating the Impact of Health Research workshop with voluntary health organizations
- Developed and implemented CIHR Citizen Engagement Framework, handbook and implementation plan
- Established Journalism Awards and the Health Research Communications Award
- ✓ Held annual CIHR Health Research Awards event
- Held symposium targeting scientists, practitioners, policy makers and citizens to explore specific topic areas, such as age-friendly built environments
- ✔ Held over 125 Cafés Scientifiques
- ✓ Launched proactive media campaign
- ✓ Attracted over 40,000 Facebook fans in both official languages

# 3 Accelerate the Capture of Health and Economic Benefits of Health Research

### **GOAL 2:** Enhance the application of research and its evaluation

#### **Five-Year Objectives**

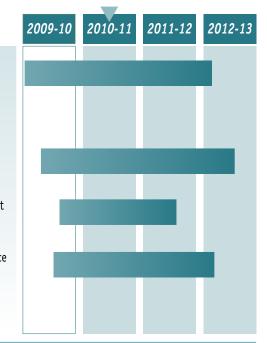
- Advance the application of research and its evaluation
- Build capacity of both researchers and knowledge users to engage in KT
- Increase the number of researchers advancing the science of KT

#### **Performance Measures**

- Number and quality of KT-related applications
- Number of knowledge users participating in research proposals
- Number of applications from researchers and knowledge users engaged in integrated knowledge translation
- Number of CIHR-funded KT researchers, number of new KT science trainees, number of KT-related training opportunities for researchers

#### **Actions**

- Develop and implement KT innovations to move knowledge into action
- Promote and support effective dissemination and exchange of research findings from CIHR investments with relevant knowledge users
- Develop and implement guides and tools to support end of grant KT and Integrated KT for applicants and reviewers
- Launch funding mechanisms that support KT science and build KT capacity



### 2009-10 Highlights of Results Achieved

### **Knowledge Translation**

- ✓ Funded the Canadian Task Force on Preventive Health Care and the Canadian arm of the Joanna Briggs Collaboration
- ✓ Funded Synthesis Network, Canadian Virtual Health Library and Canadian Cochrane Centre
- ✓ Implemented open access policy including the establishment of PubMed Canada
- ✓ Made enhancements to integrated knowledge translation programs

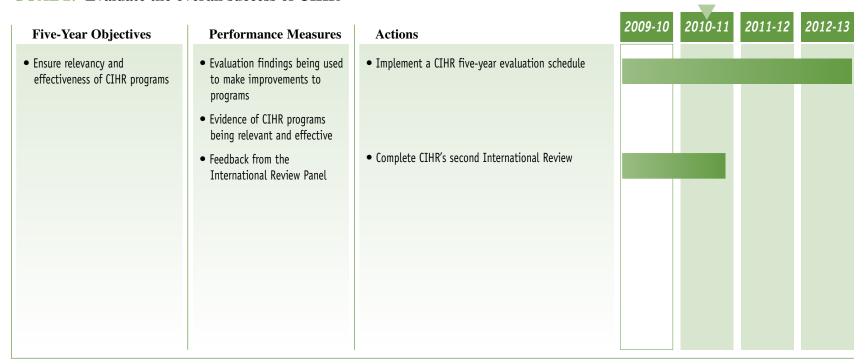
- ✓ Raised awareness and promoted KT through communication
  with stakeholders by participating in and partnering on
  national and international conferences and meetings
- ✓ Developed educational materials for researchers and knowledge users
- ✓ Published *Knowledge Translation in Health Care* (2009)
- ✓ Supported KT science through grants and supported DRAs, fellowships and new investigators focused on KT science
- Funded KT Canada and supported and promoted KT Canada initiatives such as the Summer Institute, Seminar Series, etc.

GOAL 1: Advance organizational excellence and ensure transparency and accountability



- ✓ CIHR named one of Canada's Top 100 Employers and one of the National Capital Region's Top 25 Employers
- ✓ Met or exceeded HR action plans' performance indicators
- ✓ Developed information-technology three-year plan
- Designed information architecture framework
- Completed design of CIHR Health Researcher Database to leverage Common CV renewal project

### **GOAL 2:** Evaluate the overall success of CIHR



- ✓ Completed six CIHR and interagency program evaluations and commenced work on six others
- ✓ Initiated planning for the second International Review

GOAL 3: Foster a culture of ethical research by promoting and assisting the discussion and application of ethical principles to health research

### **Five-Year Objectives**

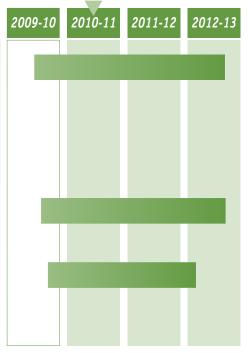
 Be nationally respected and internationally acknowledged for CIHR's role in the creation of health ethics knowledge and in its continuous translation into the highest standards of ethics and integrity in health research, policy and practice

#### **Performance Measures**

- Number of CIHR-funded ethics researchers, number of new ethics trainees, number of ethics-related training opportunities for researchers, number of policy documents developed and implemented
- Amount and type of ethics research funded
- Number and type of policy guidelines developed and implemented

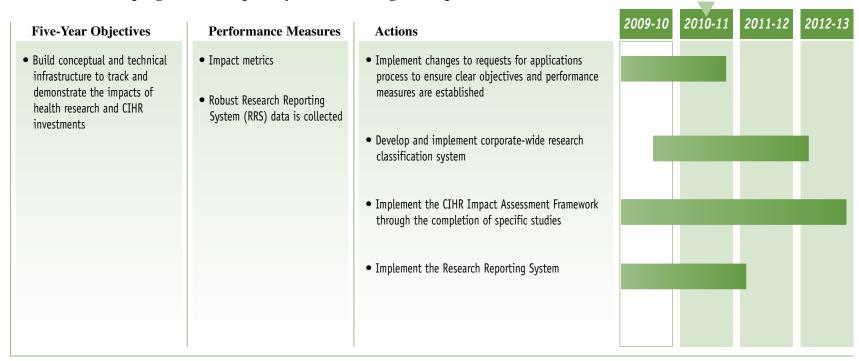
#### **Actions**

- Develop and implement a health ethics strategy to:
  - ensure ethics-based inclusion of diverse communities and vulnerable persons in health research
  - strengthen governance of research
  - promote ethics of health research in a globalized world
  - build capacity in ethics research and KT
- Enhance funding mechanisms to support the creation and foster the use of knowledge in health ethics
- Develop and implement policies and guidelines to promote the ethical conduct of Canadian health researchers and institutions supported by CIHR



- ✓ Developed draft best practices document for research involving children and adolescents
- ✓ Identified recommendations on possible improvements to the next version of the *Tri-Council Policy Statement on Research Ethics*
- ✓ Established a collaboration on education with the Secretariat on Research Ethics (SRE)
- ✓ Developed a decision-making tool for public health professionals dealing with ethics review
- Developed a draft go-forward strategy to address ethics review for multisite trials (in consultation with Standing Committee on Ethics (SCE)).

GOAL 4: Assess progress and impact by demonstrating the impacts of CIHR investments



- ✓ Developed CIHR's first Health Research Roadmap Action Plan
- ✓ Developed an end-of-grant definition for the research community
- ✓ Initiated impact assessment studies
- ✓ Implemented pilot of Research Reporting System with a sample of operating grant holders