

# ENVISIONING THE FUTURE

Manitoba Health Research Strategy: Provincial Consensus 2006 – 2011

## EXECUTIVE SUMMARY





# ENVISIONING THE FUTURE

## MANITOBA HEALTH RESEARCH STRATEGY: A PROVINCIAL CONSENSUS

### WHY NOW?

- Manitoba's position in health research is at risk
- statistics from the Canadian Institutes of Health Research indicate that every \$1 million of public investment leverages \$7 million additional dollars and creates 60 knowledge economy jobs
- Manitoba is third from last in provincial investment in health research: above only Prince Edward Island and Newfoundland

### WHAT DID WE DO?

- at the request of the Manitoba government, a province-wide planning process was conducted beginning with the Creating Our Future summit, a conference held in May 2006 that was attended by 140 people representing the five estates – academe, government, business, foundation and the health care delivery sector
- intense, iterative, participative revision of the strategy was accomplished over the summer

### HOW DO THE SUMMIT PARTICIPANTS SAY WE SHOULD PROCEED?

#### Strategic Action 1

Establish the Manitoba Health Research Council as a coordinating body for health research in Manitoba

- act as an advisory to Ministers on matters relating to health research
- lead collaborative efforts to keep the health research community focused
- sponsor the development of a coordinated peer-reviewed mechanism
- build a transparent grant structure for resource allocation

#### Strategic Action 2

Recruit, retain and support the best research faculty

#### Strategic Action 3

Facilitate research networks, linkages and communication

#### Strategic Action 4

Move research evidence into practice

### WHAT WILL IT TAKE?

#### ESSENTIAL CONDITION 1

##### Increased funding

- stage I: immediate new funding of \$4.0 million to a total investment of \$6 million annually
- stage II: incremental further increases incumbent on partner contributions to the total annual funding of \$17 to 20 million annually

#### ESSENTIAL CONDITION 2

##### Collaboration by Stakeholders

- the Manitoba Health Research Council must provide leadership for effective partnerships among the stakeholders

If we succeed with our strategy, the competitiveness of our health research sector can survive.

If we fail to move on the strategy now the good will of all parties to come together for a common purpose may be lost for the foreseeable future.

### WHY CREATE THIS STRATEGY NOW?

Manitoba's health researchers are an essential component of the province's health system and an increasingly important resource for the province's health industries. Their work involves linking discoveries made at the laboratory bench to diagnosis and treatment at the bedside and the clinic and pursuing new lines of laboratory investigation prompted by clinical observations. They are engaged in strategically important research on the health system and the efficiency and effectiveness of the organization, management and delivery of preventive, diagnostic and therapeutic services. They participate in the study of populations and the impact of socio-economic status and education on health. They train scientific and technical personnel for deployment in the health system and in industry and they make significant contributions to global health.

A hospitable environment for research is essential for attracting and retaining the health scientists required, leading, supporting and delivering both complex tertiary and quaternary services, and evidence-based primary and secondary levels of health care. Apart from what their own work produces, these researchers provide the province with the critical analytical ability needed to evaluate and adapt discoveries made elsewhere to the needs and circumstances of Manitobans.



# CLEAR VISION, SOUND ACTION

## DEVELOPING A PROVINCIAL HEALTH RESEARCH STRATEGY

---

**Health research is a significant priority for Manitoba. In recent years, the provincial government has identified a need to develop a strategy to focus and realign the resources that support this enterprise. In 2005, the province asked the Manitoba Health Research Council to lead the community in developing an action plan for health research.**

---

A key component of MHRC's strategic leadership was a three-day conference - Creating our Future: A Strategic Planning Summit for Health Research in Manitoba - held in May 2006 at the Hotel Fort Garry in Winnipeg. There, 140 stakeholders met to discuss issues, develop a vision and forge a series of measurable actions. The result was the following action plan, one that outlines vital steps that if implemented will increase Manitoba's national and international success in health research.

### SUMMIT STEERING COMMITTEE

Representatives from various stakeholder groups guided discussion of the topics at the summit. These individuals also served as ambassadors of this initiative to the community:

**J. Dean Sandham**, *Dean, Faculty of Medicine,  
University of Manitoba (Chair)*

**Arnold Naimark**, *Director, Centre for the  
Advancement of Medicine*

**John Clarkson**, *Deputy Minister, Manitoba Science,  
Technology, Energy and Mines*

**Brian Postl**, *CEO, Winnipeg Regional Health Authority*

**Kevin Kavanaugh**, *Distinguished Member,  
Business Council of Manitoba*

**Ian Smith**, *Director General, National Research  
Council Institute for Bi diagnostics*

**Joanne Keselman**, *Vice-President, Research,  
University of Manitoba*

**Arlene Wilgosh**, *Deputy Minister, Manitoba Health*

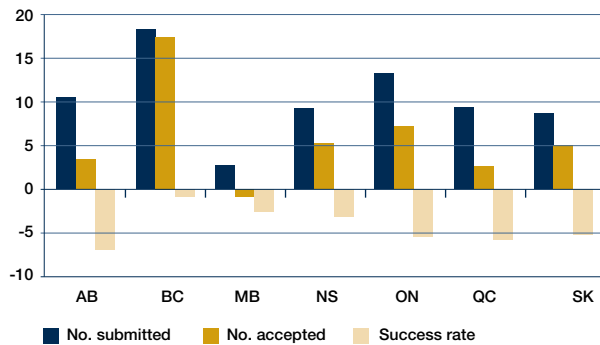
## MANITOBA'S POSITION IN HEALTH RESEARCH IS AT RISK

Despite the critical role health research plays in the province, Manitoba's competitive position in Canada has been seriously eroded. Manitoba is fast losing ground to other provinces in the relative scale of its support for health research. This will decrease its capacity to compete successfully for research funding from federal agencies and other sources, to achieve its potential in contributing to advancing the quality and effectiveness of health care and to innovation and economic development.

One indicator of Manitoba's success is its share of funding from the national granting council for health research – the Canadian Institutes of Health Research (CIHR). In terms of per capita funding from CIHR for the years 1999-2005, Manitoba shared fifth place with Nova Scotia – a province that historically was well below Manitoba. Both provinces received just under \$16 dollars per capita— trailing behind Quebec (\$24 per capita), Alberta (\$23), Ontario (\$20) and British Columbia (\$17).

While these current figures place Manitoba in the middle of the pack, the trend is ominous. A sobering indicator of Manitoba's grim future is the low annual growth rate in the number of research proposals submitted to and accepted by CIHR.

Figure 1:



On average, Manitoba submitted about 2.5 percent more proposals with each additional year and about 1 percent less were accepted each year compared to the previous year. In contrast, British Columbia submitted, on average, about 18 percent more proposals with each additional year and about 17 percent more proposals were accepted each year compared with the previous year.

Manitoba exhibits the lowest growth rate in proposal submission and acceptance and is the only province with a negative percentage change in the number of proposals accepted. The long term impact of this trend will be a decrease in Manitoba's total and per capita funding from CIHR which in turn will limit the overall success of the community.

The Canada Foundation for Innovation (CFI) is another federal funding agency which provides matching funding for infrastructure. Manitoba has received 1.5 percent of the health research related funding that CFI has distributed in its competitive programs since its inception in 1998. This amounts to \$12.6 per capita and places Manitoba seventh in Canada.

Manitoba's falling success in competing for funding from national funding bodies can be attributed to two main causes: failure to match substantial and growing investments in health research made by other provinces that allow researchers in those provinces to compete more effectively for national and international funding and a lack of a coherent vision for the future among the health research community and its supporters in Manitoba.

Provincial investments in health research will leverage significant funding into the province. The level of local

Table 1:

Provincial Health Research Organizations	Expenditures (2005)
MSFHR (BC)	\$ 32,000,000
AHFMR	\$ 60,000,000
SHRF	\$ 6,000,000
MHRC	\$ 2,500,000
Ontario	\$ 76,000,000
FRSQ (QC)	\$ 83,000,000
NSHRF	\$ 3,800,000
PEIHRI	\$ 100,000
NLCAHR (Nfld)	\$ 500,000

investments is also a key indicator of success at garnering national funding. The Manitoba Health Research Council (MHRC) supports health research on behalf of the provincial government and in 2005 received \$1.95 million from the province and with its carryover funds invested \$2.5 million. Comparing the expenditures of the provincial health research organizations (see Table One) the MHRC is third from last, ranking above only Prince Edward Island and Newfoundland (New Brunswick does not have a dedicated provincial health research funding body). In comparison, both Saskatchewan and Nova Scotia have larger budgets than MHRC, despite having smaller populations.

In addition British Columbia, Saskatchewan and Nova Scotia have revitalized their local funding organizations in the past five years and created long term strategic plans to provide organized leadership and common focus to their research communities' activities.

As noted earlier, Manitoba is not only investing less on health research than most other provinces, there is also a lack of a coordinated strategy for and by the health research community. There are a number of local organizations that provide funding and support for health research, including provincial government departments, local hospital based foundations, the Manitoba Medical Services Foundation and disease based foundations such as the Heart and Stroke Foundation. Many of these organizations have similar competitions which encourage multiple submissions for the same research project. This system duplicates administrative efforts, the work of local peer review panels, and the efforts of the students and researchers.

## WHAT HAVE THE SUMMIT PARTICIPANTS DONE IN RESPONSE TO THE REQUEST?

### CLARIFIED LEADERSHIP

*Bringing the community together*

During the fall of 2005, in reaction to the falling success rates at CIHR and CFI and to help rectify the challenges and bring clarity to health research in Manitoba, the Province requested that the Manitoba Health Research Council (MHRC) lead the community in the development of a provincial strategy for health research.

At the end of May 2006, stakeholders from academia, health services, non-governmental organizations, industry and government came together at the Creating our Future summit to develop a vision and the strategic actions required to make the vision a reality. Overwhelmingly, participants called for the strong leadership and increased financial investment needed to build health research capacity in Manitoba. The following strategic actions being recommended to the Government of Manitoba were identified in preliminary form at the conference and subsequently refined in further consultations with the stakeholders.

## HOW DO THE PARTICIPANTS PROPOSE TO PROCEED?

*Strategic Cooperation – Moving towards a shared vision*

### STRATEGIC ACTION 1

Establish the MHRC as a coordinating body for a comprehensive and inclusive health research agenda that leads to improved health and increased economic opportunities for the Province of Manitoba

The year 2007 marks the 25th anniversary of the official establishment of the Manitoba Health Research Council.

Initially created after a meeting between Dr. Arnold Naimark, Dr. Henry Friesen, Dr. Lyonel Israels and the provincial Minister of Health, the MHRC was established to promote and assist basic, clinical and applied research in the health sciences in Manitoba and to advise the Minister on health research matters referred to the council. Over its 24-year history, the council has carried out its mandate primarily through financial support (grants and awards) to newly appointed investigators, postdoctoral fellows and graduate students.

The milestone of the 25th anniversary of the council provides an opportunity to redefine the mandate and composition of the council so that it is equipped to meet the challenges described earlier. The composition of the council should be reflective of the key stakeholder groups in the community – academia, health services, industry, NGOs and government. The proposed mandate of a revitalized council is outlined below.

### PROPOSED MHRC MANDATE

1. Advisor to Ministers of Science, Technology, Energy and Mines, Health and Healthy Living on matters referred to the Council relating to health research or health policy.
2. Lead the collaborative efforts of the health research community and its stakeholders, to develop and implement strategies that optimize health research investment.
3. Build a comprehensive granting structure for resource allocation which builds capacity for research in Manitoba.
4. Sponsor the development of a coordinated Peer Review Mechanism in Manitoba which can provide scientific peer reviews and assessments of a high standard on proposals for grant funding from the MHRC and the Manitoba Research and Innovation Fund and which can be used by other granting programs in the province.

### STRATEGIC ACTION 2

Identify, develop, recruit and retain the best researchers and provide sustained support to facilitate their growth

*“Talent is the primary source of innovation. Leaders in the field of health research... are the key to future success. Investment in health research supports current leadership and provides the resources to train the next generation of scientific leaders.”*

Universities across Canada are in a desperate competition to recruit the best and the brightest to their institutions. The current system to fund researchers is a complex system supported by various sources including universities, regional health authorities, hospital based foundations and granting agencies and is inadequate to effectively support the recruitment and retention of leading researchers and clinicians. It is clear that additional support for researchers, including protected time and funding for research, through salary awards and establishment grants and infrastructure is critical to further enhance capacity within the system.

Nation-wide data indicates that those with salary support, on average, have 20 percent more research funding in the long-term than those without. Also, a significantly higher proportion of those with salary awards train students, postdocs and residents compared with those without salary awards.

Importantly, one group which needs special consideration and increased support is the clinician scientist which refers to those whose primary training is clinical in nature, but who have also obtained research training either before, during or after becoming medically qualified. Clinician scientists play a vital role in moving research evidence into education and practice.

### STRATEGIC ACTION 3

Facilitate networks, linkages and communication throughout the Manitoba health research enterprise and beyond

The growing complexity of health problems and the need to satisfy new research expectations necessitate networks and linkages among researchers and require increased communication with public officials, community groups and citizens. Consider the recent cases of tuberculosis in northern Manitoba. Why are Aboriginal peoples more susceptible to TB than the rest of the population? Is it environment, genetics, history or all three? In order to answer these questions, researchers from various disciplines must come together with the Aboriginal community and public health officials.

Research networks also facilitate the efficient use of resources and enhance transfer of knowledge into practice. Similarly, linkages between and among health research institutes and funding organizations encourage development of provincial platforms and enhance the local peer review process. Moreover, transferring knowledge into policy changes or practice becomes easier when there is a relationship between the researcher and the public officials using the information, who have participated in the development of the project and understand its potential application.

The continued encouragement and development of networks and linkages within the health research enterprise is fundamental to building sustainable research capacity in Manitoba.

### STRATEGIC ACTION 4

#### MOVE RESEARCH EVIDENCE TO PRACTICE

Knowledge translation is defined by CIHR as:

*“The exchange, synthesis and ethically sound application of researcher findings – within a complex system of relationships among researchers and knowledge users – to accelerate the capture of the benefits of research for Canada through improved health, more effective services and products and a strengthened health care system.”*

Yet, despite the recognized importance of translating research outcomes, there is agreement in the literature that the knowledge generated by research is vastly under-utilized in decision making in all venues, including clinical practice and community based and health system policy decisions. Research has identified a number of factors which can enable the process. These include:

- developing and sustaining a cadre of clinician scientists who are critical to the translation process and encourage collaboration between the basic sciences and clinical research communities
- developing an environment and infrastructure to support clinical research
- building on-going relationships between and among researchers, practitioners and the community
- disseminating research outcomes in ways that are active and effective
- building capacity of decision makers to acquire and use relevant research, otherwise known as receptor capacity
- ensuring knowledge translation is an ongoing process

## WHAT WILL IT TAKE?

### ACHIEVING THE VISION

Implementing the five strategic directions, and thus achieving the vision, can only be accomplished if the following two conditions are met: the provision of increased provincial funding for health research and increased collaboration among the stakeholders within the health research community.

### INCREASED PROVINCIAL FUNDING FOR HEALTH RESEARCH

Annual funding for the MHRC was initially \$300,000 and increased to a high of \$1.95 million in 1989 where it remained until 1993 when funding was cut to \$1.75 million. MHRC's budget was restored to \$1.95 million in 2003-'04 where it has remained. The purchasing power of this funding level, which was well below what was required even in 1989, has been seriously eroded by the increase in research costs in the 24 years since it was established.

To truly enhance capacity to undertake health research in Manitoba, the MHRC must introduce new funding programs that support the strategic directions and enhance its internal capacity to do so. It is estimated that to fully implement the recommended actions in the strategy it will require an annual investment of \$20 million (in 2006 dollars recognizing that inflation in research costs will increase the amount required in nominal dollars). It is recognized that this level of funding cannot be deployed at once and therefore a phased build-up of this level of appropriation should take place over the next six years.

#### STAGE ONE

Initially, the MHRC is requesting a budget of \$6 million (2006 dollars) from the Province of Manitoba to be made up of the current appropriation of \$1.95 million and an additional amount of \$4.05 million of investment that is new and not a reallocation of funding already being used to support health research through other programs. This new investment will allow the Council to increase funding for trainees and develop new programs to fund salary awards, infrastructure support and team grants. The funding will also establish credibility for MHRC within the community, facilitating the enrollment of other partners in its activities and programs.

Increased retention and recruitment of health researchers and a resulting enhancement of the health research industry in Manitoba will be one of the short term outcomes of the

increased funding. An increase in the amount of national and international funding leveraged into Manitoba is also expected and will further strengthen the capacity of the enterprise and its ability to generate new discoveries that will spin out as new companies or improve health services. The initial provincial investment will leverage dollars from local NGOs and industry partners, thereby increasing the amount and focus of local funding for health research.

#### STAGE TWO

Subsequent to meeting a set of jointly established goals which could include leveraged funding from local NGOs and industry partners and an increase in national and international funding, the MHRC will once again seek provincial funding to round out the remaining portion (the difference between \$20 million and the \$6 million initially provided, plus the amount provided by partners) of the required \$20 million (2006 dollars) annual budget. If the goals are not met, the MHRC will not return to the Province of Manitoba for additional funding.

### COLLABORATION AMONG STAKEHOLDERS

It is incumbent on the MHRC to build partnerships and to facilitate relationships among and between the various stakeholder groups. This process began during the Creating our Future summit and will continue with the creation of a new Council that is to be reflective of the associated stakeholder groups.

Partner contributions to the implementation of various recommended programs are critical to the achievement of the strategy. In addition, MHRC is reviewing options to share certain staff resources with the Health Care Products Association of Manitoba and this fall MHRC will also engage various local research institutes with the hopes of rationalizing the many programs which currently support graduate students in Manitoba.

Increased funding and collaborative efforts of the community are crucial to the implementation of the strategy. If both conditions are in place the community will see increased success not only in terms of an increase in federal funding but better health and health care services and support for the economy of Manitoba.





# CONCLUSION: ACT NOW FOR A BRIGHTER FUTURE

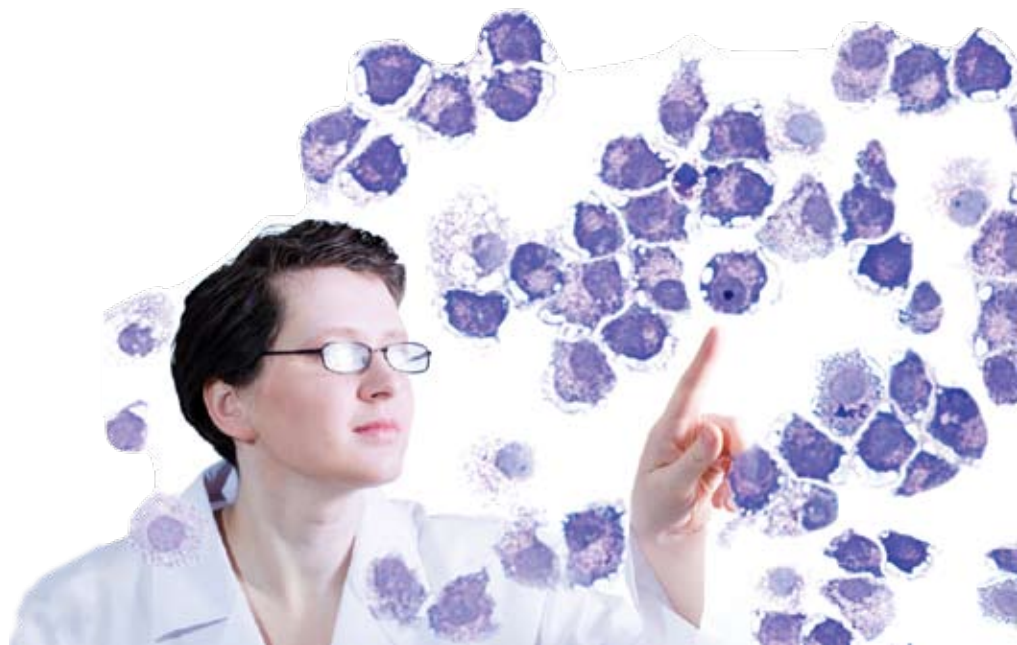
## WORKING TOGETHER FOR EXCELLENCE AND INNOVATION

---

The achievement of this planning process is a unique alignment of the entire community of health research in a way that has not happened before in Manitoba. Everyone accepts that health research is important. More importantly from this process participants have decided that we must all “bring something to the table” to work together to continue to be competitive nationally. The benefits of supporting health research range from reducing the economic impact of the burden of illness, to improving health outcomes of citizens, to supporting a growing biotech sector.

But these benefits, as proposed, can only be realized if an adequate, high quality health research capacity is developed and supported. The vision and the strategic actions to realize it will serve to focus the activities of the health research community and increase its national and international success.

If we fail to act now, the goodwill of all parties to come together for a common purpose may be lost for the foreseeable future. Our ability to recruit and retain in all aspects of health service delivery as well as research will be damaged.





**MANITOBA HEALTH RESEARCH COUNCIL**

P216-770 Bannatyne Avenue Winnipeg Manitoba R3E 0W3  
telephone 204 775.1096 fax 204 786.5401 e-mail [info@mhrc.mb.ca](mailto:info@mhrc.mb.ca) website [www.mhrc.mb.ca](http://www.mhrc.mb.ca)