



**LEVERAGING OUR INVESTMENTS
IN HEALTH & HEALTH RESEARCH...
DRIVERS OF SUSTAINED PROSPERITY**

**A SUBMISSION TO
THE HOUSE OF COMMONS
STANDING COMMITTEE ON FINANCE
SEPTEMBER 2006**

WHO WE ARE...

ACAHO is the **national voice** of Teaching Hospitals, Regional Health Authorities and their Research Institutes. The Association represents more than 40 organizations. Members range from single hospitals to multi-site, multi-dimensional regional facilities.

Members of ACAHO are leaders of innovative and transformational organizations who have overall responsibility for the following integrated activities:

- Timely access to a range of quality specialized and some primary health care services.
- Representation for all of the principal teaching sites for Canada's health care professionals including seventeen Faculties of Medicine and Faculties of Health Sciences.
- Infrastructure to support and conduct health research in its dimensions - medical discovery, knowledge creation, innovation and commercialization.

There are no other organizations in the health system that provide the unique combination of health services that our member do. We consider our institutions as vital "hubs" in the system – in addition to being a national resource.

OUR MISSION...

The mission of ACAHO is to advance and promote excellence in the delivery of quality health services, the teaching & educational experience, and the health research & innovation enterprise.

OUR MANDATE...

The mandate of ACAHO is to provide effective national leadership, advocacy, and policy representation in the three related areas of:

- Funding, organization, management and delivery of highly specialized tertiary and quaternary, as well as primary health care services.
- The education and training of the next generation of Canada's health care professionals.
- Infrastructure to support and conduct basic and applied health research, medical discovery, innovation and commercialization.

For more information on the activities of the Association, please visit our web-site at www.acaho.org.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
SUMMARY OF RECOMMENDATIONS	v
1. INTRODUCTION...	1
2. SETTING THE CONTEXT...	1
3. TIMELY ACCESS TO QUALITY CARE...IN SEARCH OF CERTAINTY	2
- Educating the Health Professionals of Tomorrow	
- Information Technologies, EHRs and Health System Innovation	
- (Re) Building System Delivery Capacity	
- Strengthening Public Health Capacity	
4. RESEARCH EXCELLENCE, INNOVATION & COMMERCIALIZATION	8
- Reflecting on Canada's Research Enterprise	
- Looking to the Future	
- Basic and Applied Health Research	
- Health Research Infrastructure	
- Maximizing the Full Economic Potential of Innovative Health Research	
5. TAX POLICY & HEALTH POLICY...ALIGNING INCENTIVES	13
6. IN CLOSING...	13
ENDNOTES	14

EXECUTIVE SUMMARY

In a world where managing the rapid pace of change is the rule, and not the exception, Canada has an impressive international record, with much to be proud of. That said, with the knowledge-based economy increasingly characterized by competition and innovation, the search for excellence and economic interdependence, we cannot afford to take our current status and quality of life for granted.

The Association of Canadian Academic Healthcare Organizations (ACAHO) is the national voice of Teaching Hospitals, Regional Health Authorities and their Research Institutes. The Association represents more than 40 organizations which range from single hospitals to multi-site, multi-dimensional regional facilities. Our members serve a unique and very essential role in the health care system, they: (1) play a critical role in improving access to a range of quality specialized health care services (as well as some primary care services); (2) train the majority of next generation health care professionals, producing a workforce that is skilled, diverse and adaptable; and (3) support and conduct the large majority of publicly-funded health research in the country, and advance leading-edge innovative practices in the health system, and discoveries to the marketplace.

Given the focus of the Association's membership, we believe that there are several areas where there is a "comparative health policy advantage" where the federal government has a significant and natural role in improving the health and health care of Canadians, and also to continue to position Canada as a global leader when it comes to harnessing the full economic and social dividends that come from investing in research, innovation and commercialization.

In the view of the Association, to do so requires clear *leadership*, strong *stewardship* and collaborative *partnership*. Based on the recommendations offered in this Brief, ACAHO strongly believes that the federal government can play a vibrant and legitimate role in shaping the future health and economic landscape of this country. Underpinning these recommendations is the importance of celebrating excellence while remaining fully accountable for our actions.

TIMELY ACCESS TO QUALITY CARE...IN SEARCH OF CERTAINTY

1. EDUCATING THE HEALTH PROFESSIONALS OF TOMORROW

If the health system is to thrive and not simply survive, then we must ensure continued investment in our most prized assets – health care professionals. While it is unlikely that anyone would disagree with this over-arching policy statement, the question remains what specific role the federal government can play in this area.

ACAHO, in principle, supports a Pan-Canadian health human resources strategy to make Canada self-sufficient in producing an adequate supply of health human resources. This would include the creation of a pan-Canadian body or coordinating mechanism for health human resources. There is also a strong consensus by the Canadian Medical Forum as well as Task Force Two that such a body is urgently required.

In addition, more needs to be done in terms of the federal government working with provincial and territorial governments to invest in the relationship between the number of students enrolled in the Faculties of Medicine and Health Sciences, and their requisite training positions.

ACAHO is also concerned about the system's *capacity* to train an adequate number of health care professionals. Keep in mind that health care professionals' hands-on experience is largely within teaching hospitals/centres. This latter point underscores one essential role of teaching hospitals/centres in Canada – which provides virtually all post-graduate health care professional training infrastructure. Our view is that investing in physical infrastructure is a critical success factor that must go hand-in-hand with future health human resource planning requirements.

As a national resource in the system, members of ACAHO believe that there is a crucial role for the federal government in terms of financially assisting teaching hospitals/centres in expending their capacity to train a growing cohort of health care professionals in their institutions (*see Recommendation #1*).

2. INFORMATION TECHNOLOGIES, THE EHR & HEALTH SYSTEM INNOVATION

While there is a consensus about the need to accelerate the pace of reforming the health system, much is contingent on how we collect, manage and integrate information more effectively (e.g., from more cost-effective clinical decisions to better wait time management processes). Thus, an important element in the renewal of the system is having state-of-the-art information technologies at hand. EHRs can also play a vital role in making sure that patients, and their case histories are “portable”.

International experts agree that there will be no quantum leap forward in health care quality and efficiency without high quality, user-friendly electronic health information. The electronic health record leads to safer, higher quality, and more efficient care. As well, the electronic health record also saves time for healthcare providers and makes the healthcare experience more convenient for patients (*see Recommendation #2*).

3. (RE)BUILDING SYSTEM DELIVERY CAPACITY

Today, the national policy discussion about the future of the health system is largely concerned with the “operational” resources that are needed to provide Canadians with access to a range of quality health care services. As vitally important as this is, it is equally essential that we consider the state of the system's delivery capacity (i.e., infrastructure), and what is required for the future knowing that much of our acute care institutional capacity was built around the turn of the century.

In the view of ACAHO, the current stock of institutions remains under-funded and depreciation is not fully recognized by the federal or provincial governments from a funding perspective. As a result, hospitals have limited resources to either upgrade their facilities, or if required expand capacity (for example, in Ontario alone, hospital capital investment modernization and capacity expansion requirements have been conservatively estimated to be between \$7.0 and \$9.0 billion).

ACAHO strongly supports federal resources that would be targeted to assist teaching hospitals/centres in renewing their delivery infrastructure and enhance their capacity and ability to meet their mission and mandate as a national resource in the system (*see Recommendation #3*).

4. STRENGTHENING PUBLIC HEALTH CAPACITY

Members of ACAHO are actively pursuing a number of public health initiatives, many of which include cutting edge research and the development of innovative public health networks. Explicit processes and programs which have been developed to improve public health across the country serve to *improve the transparency* of decision making processes in times of crisis, and clarify many of the *accountability* relationships when it comes to public health emergency planning.

In short, as much as we think about public health in a *national* context, we must ensure that we have the resources and processes in place to act *locally* (*see Recommendation #4*).

RESEARCH EXCELLENCE, INNOVATION & COMMERCIALIZATION...DRIVERS OF FUTURE PROSPERITY

In the view of ACAHO, research is the oxygen of an evidence-based health system. It is the basis on which many sound public policy decisions are based. It is the backbone of a health system upon which cost-effective clinical and/or administrative decisions are taken.

Research is the foundational building block that facilitates innovation in at least three dimensions, it: (1) contributes to improving the individual and collective health status of Canadians; (2) impacts on the architecture of the health system and the manner in which we deliver a range of cost-effective health services; and (3) produces leading-edge, world class discoveries that provide opportunities to leverage major economic benefit as well as health gains.

1. BASIC AND APPLIED HEALTH RESEARCH

The Canadian Institutes of Health Research

The Canadian Institutes of Health Research (CIHR) is the country's premiere funding Agency for health research. While there have been significant increases in CIHR's budget over the past few years, including an additional \$17 million in the Spring 2006 Budget, ACAHO is strongly supportive of a multi-year fiscal framework that will increase its base by \$350 million over the next 3 years (*see Recommendation #5*).

2. HEALTH RESEARCH INFRASTRUCTURE

Indirect Costs of Research

ACAHO strongly applauds the federal government for its incremental investment in the Indirect Costs Program and would encourage the federal government to continue to augment the value of the program so that it is funded at an appropriate international competitive level to reflect the input costs associated with undertaking world-class research within an increasingly competitive global environment. ACAHO has been consistently of the view that it supports a proportion of 40% - which is intended to reflect the operating costs associated with federal funded research (*see Recommendation #6*).

Canada Foundation for Innovation

From the perspective of ACAHO, the Canada Foundation for Innovation (CFI) has played a critical role in rejuvenating the country's health research infrastructure and thereby enabled leading edge research which could not have otherwise been undertaken. Since its creation in 1997 with an endowment of \$3.65 billion, the Foundation, on average, invests \$400 million a year in building world class research facilities.

In order to continue the significant momentum that has been created by CFI, it is the view of ACAHO that the federal government ought to take the appropriate steps now to further invest in research infrastructure through CFI in 2006 (*see Recommendation #7*).

3. MAXIMIZING THE FULL ECONOMIC POTENTIAL OF INNOVATIVE HEALTH RESEARCH

ACAHO is supportive of initiatives to commercialize research that recognize the unique potential and environment that resides within teaching hospitals/centres and their research institutes. These initiatives should embrace the many dimensions of innovation that stem from health research and move through the stages of development, testing, production, financing and marketing. Importantly, initiatives must play an important role in developing a coordinated and integrated strategic plan that would nurture specific areas where Canada has a comparative advantage in health research and development.

ACAHO strongly supports the development of health research networks focused on commercialization – which include investments in human capital development and receptor capacity-building (*see Recommendation #8*).

TAX POLICY & HEALTH POLICY...ALIGNING INCENTIVES

1. ADMINISTRATION OF THE GST/HST REBATE FOR PUBLIC HOSPITALS

Currently, public hospitals in Canada are eligible for an 83% rebate on GST paid while other parts of the health system (e.g. not-for-profit long-term care facilities and many home and community care services; and health research) are eligible for a 50% rebate. While some health sector purchases are exempt or zero-rated, there are still many purchases that attract GST, to which the rebate system applies. The challenge, therefore, has been to define which purchases are eligible for the hospital rebate.

To date, ACAHO is encouraged by the response of the Canada Revenue Agency and looks forward to resolving this issue (*see Recommendation #9*).

As outlined by the Standing Committee on Finance, the Association looks forward to participating in a national dialogue to position Canada as a global leader within a competitive world economy through a series of interlocking policy measures that support the twin policy objectives of improved health and health care for all Canadians, and a more robust, innovative and productive society.

SUMMARY OF RECOMMENDATIONS [IN ORDER OF PRIORITY]

HEALTH SYSTEM CAPACITY-BUILDING

Recommendation #1 (page 5)

*That the federal government, working in close collaboration with the provinces and territories, establish a **National Health Human Resource Fund** to build capacity to educate and train Canada's health care professionals.*

Recommendation #2 (page 6)

That the federal government invest an additional \$1.8 billion (\$600 million over the next three years) to accelerate the work of Canada Health Infoway.

Recommendation #3 (page 7)

*That the federal government create a one-time **Health Delivery Infrastructure Fund** to assist teaching centres/hospitals (re) build their delivery capacity to provide timely care to Canadians.*

Recommendation #4 (page 7)

That the federal government increase core funding for federal public health functions by an additional \$525 million annually to facilitate a coordinated and comprehensive response to the public health needs of Canadians by all levels of government and non-government organizations.

Recommendation #9 (page 13)

That the federal government increase the GST rebate under the MUSH Formula for eligible hospital authorities to 100% of eligible input costs.

RESEARCH, INNOVATION & COMMERCIALIZATION

Recommendation #7 (page 12)

That the federal government take the appropriate steps to invest \$1.0 Billion in support of world class research infrastructure through Canada Foundation for Innovation (CFI) in 2007.

Recommendation #8 (page 13)

That the federal government – as it continues to support initiatives that accelerate the commercialization of (health) research – must take into account the unique characteristics of Canada's Teaching Hospitals/Centres and their Research Institutes, and the role they play in the commercialization process.

Recommendation #6 (page 11)

That the federal government increase funding available for the indirect costs associated with research funded by the three federal Granting Agencies from \$300 million to \$450 million (40%), effective 2007/08.

Recommendation #5 (page 10)

That the federal government increases the base budget of the Canadian Institutes of Health Research (CIHR) by \$350 million over the next 3 years, and consider targeted funds that are issue-specific and strategically focused.

1. INTRODUCTION...

The Association of Canadian Academic Healthcare Organizations (ACAHO) is the national voice of Teaching Hospitals, Regional Health Authorities and their Research Institutes. The Association represents more than 40 organizations which range from single hospitals to multi-site, multi-dimensional regional facilities. With funding at \$18.0 Billion, our members account for approximately one in two public dollars that is invested in acute care, and employ over 200,000 Canadians. In addition, over \$2.0 billion is invested in our members' institutions for health research, annually.

Our members serve a unique and very essential role in the health care system, they: (1) play a critical role in improving access to a range of quality specialized health care services (as well as some primary care services); (2) train the majority of next generation health care professionals, producing a workforce that is skilled, diverse and adaptable; and (3) support and conduct the large majority of publicly-funded health research in the country, and advance leading-edge innovative practices in the health system, and discoveries to the marketplace.

In many respects, these “deliverables” are some of the foundational elements that underpin our collective ability to strengthen the fabric of Canadian life and build a truly modern and prosperous 21st century economy.

Given our unique system responsibilities, we strongly believe that our members have a critical role to play in improving the linkages between improved health and health care for all Canadians and the country's ability to prosper on a sustained basis. In other words, members of ACAHO have an essential contribution to make when it comes to advancing the *health & wealth* of the nation – from coast-to-coast-to-coast.

2. SETTING THE CONTEXT...

In a world where managing the rapid pace of change is the rule, and not the exception, Canada has an impressive international record and much to be proud of. That said, with the knowledge-based economy increasingly characterized by competition and innovation, the search for excellence and economic interdependence, we cannot afford to take our current status and quality of life for granted.

Understanding that “*Canada's Place in a Competitive World*” is the focus of the Standing Committee on Finance deliberations, four specific questions have been identified.¹ In the view of the Association, these policy issues cover a wide range of complementary solutions.

Given the focus of the Association's membership, we believe that there are several areas where there is a “comparative health policy advantage” where the federal government has a significant and natural role in improving the health and health care of Canadians, and also to continue to position Canada as a global leader when it comes to harnessing the full economic and social dividends that come from investing in research, innovation and commercialization.

In the view of the Association, to do so requires clear *leadership*, strong *stewardship* and collaborative *partnership*. Based on the recommendations offered in this Brief, ACAHO strongly believes that the federal government can play a vibrant and legitimate role in shaping the future health and economic landscape of this country. Underpinning these recommendations is the importance of celebrating excellence while remaining fully accountable for our actions.

As we look to the future, it would appear that Canada must ensure (at least) the following: (1) that we have a vibrant and healthy population; (2) that we have the necessary skills to compete and prosper; and (3) that we celebrate excellence and invest in processes and structures that place Canada at the cutting-edge of discovery, knowledge creation, and bringing innovative goods and services to international markets.

This is where the policy *intersection* between health & wealth is visible, tangible and substantial. While there are those who would argue that wealth creation is a precondition to investing in health, others are of the view that without a series of fixed investments in the health of Canadians there is limited ability to fully harness and leverage our economic performance and potential.

The reality is that investing in the health & wealth of the country is not a zero-sum proposition; there must be opportunities to consider how a balanced and strategic approach to investing in each stream can produce significant benefits that are greater than the individual sum of each.

More clearly, investing in the health of Canadians should be viewed as a pre-condition for sustained economic expansion. As well, considering how we can improve Canada's economic position in an increasingly competitive and global world can provide governments with an increasing array of social and health policy options.

With this in mind, ACAHO believes that it has a unique perspective and fundamental role – not to mention contribution – to bring to the deliberations of the Standing Committee. Given the range of policy challenges that are before us, the Brief focuses on 3 strategic areas that are critical to our collective future:

1. Timely Access to Quality Care...In Search of Certainty
2. Research Excellence, Innovation & Commercialization...Drivers of Future Prosperity
3. Tax Policy and Health Policy...Aligning Incentives

3. TIMELY ACCESS TO QUALITY CARE...IN SEARCH OF CERTAINTY

It is clear that wait times are the barometer by which Canadians perceive the performance of the health system. Patients are looking for certainty in terms of how long they will have to wait for care. Yet, as important as wait times are, their very existence is closely linked to a range of other policy issues.

For example, the lack of available family physicians, specialists, nurses or technicians has a direct impact on the availability of health services. Further, limited operating revenues for teaching hospitals and/or regional health authorities can also impact on the number of surgical suites, as can restricted capital budgets limit the number of diagnostic and therapeutic pieces of equipment in use – not to mention existing and future wards. In other words, as much as there has been an appropriate focus on the amount of time one waits for care, there are a combination of policy pressures (and levers) related to the overall *capacity* of the system that must also be considered and addressed.

In September 2004, a new era of system accountability was ushered in by First Ministers (“A 10-Year Plan to Strengthen Health Care”) with the commitment to benchmarks and targets for five priority areas. While the Association publicly applauded the significant progress that was made by all jurisdictions, it noted that we must ensure that the health system has the *capacity* to meet

the benchmarks (and the targets that have yet to be released), and that further collaborative work was necessary.ⁱⁱ

Since that time, important work has been commissioned by the federal government with the release of final report of the Federal Advisor on Wait Times.ⁱⁱⁱ The report clearly notes “...benchmarks alone will not solve the problem of timely access to the health care system. Many factors combine to create the long wait lists that Canadians sometime experience. It is the analysis and remediation of these factors that will help to ensure that our achievements in establishing benchmarks show lasting benefits to Canadians.” The Association could not agree more.

The following comparative figures from the Organization for Economic Cooperation and Development (OECD) speak to this issue:^{iv}

- ▶ Canada has the highest acute care occupancy rate (91%) amongst the G-7 countries – and ranks the highest out of 21 OECD countries.
- ▶ Canada has 32% fewer physicians per 1,000 population than the OECD average (ranking 21st out of 24 OECD countries).
- ▶ Canada has 28% fewer acute care beds per 1,000 population than the OECD average (ranking 19th out of 27 OECD countries).

Combined, these figures speak to the limited capacity of our health system.

Notwithstanding some of the important challenges we all face in terms of ensuring that we have the capacity to provide timely access to a range of quality health services, a recent report released by ACAHO documents a number of innovative management strategies that are being implemented across the country.^v This not only includes better ways of managing current resources and organizing the care delivery process, but highlights a series of targeted investments that are designed to expand the *capacity* of the system (such as an increase in physicians, nurses and technicians; extending the hours of operation for existing operating suites; central booking systems, and the introduction of clinical assessment and prioritization tools). In our view, and on a number of fronts, important progress is being made, however, more needs to be done in partnership with governments, providers, the public and others.

In this regard, it is the considered view of the Association that there is a legitimate and accepted role for the federal government to provide clear *leadership*, strong *stewardship* and collaborative *partnerships* designed to advance the responsiveness of the health system and the confidence of Canadians.

Specifically, there are four inter-connected elements where the federal government can provide significant “added-value” to the health system through a combination of time-limited and strategically targeted policy initiatives:

1. Invest in Canada’s ability to train and educate an adequate number of health care professionals, now and into the future.
2. Accelerate the introduction of health information technologies to improve the clinical as well as administrative decision-making processes.
3. Ensure there is adequate delivery infrastructure to provide timely care to patients.
4. Invest in the generation and dissemination of knowledge that can be gained through health research (see Section 4 of the Brief).

These elements of capacity should be viewed as a series of cohesive system measures that are necessary to ensure that the health system remains flexible, dynamic and responsive over the medium and longer-term. Also, these elements of capacity are closely aligned with the recent views articulated by the Minister of Health in the House of Commons.^{vi} Each is addressed in turn:

1. EDUCATING THE HEALTH PROFESSIONALS OF TOMORROW

If the health system is to thrive and not simply survive, then we must ensure continued investment in our most prized assets – health care professionals. While it is unlikely that anyone would disagree with this over-arching policy statement, the question remains what specific role the federal government can play in this area.

If the prime objective of the health system is to ensure that Canadians have timely access to a range of quality health care services, there are growing concerns that the current and future supply of health care professionals (be it physicians, pharmacists, nurses, technicians or others) is not able, now or into the future, to meet the demand for health services.^{vii}

ACAHO would agree with the Minister of Health who earlier this year said: “*I wish to work actively with our partners from provincial and territorial governments, as well as with stakeholders, to provide Canadians with the best pool and distribution of skilled workers to fill the many roles vital to our health system.*”^{viii} More recently, in his speech to the Canadian Medical Association, the Minister of Health recognized some of the challenges associated with the supply of health care providers now and into the future, and the role of the federal government.^{ix} The view of the Association, however, is that more must be done.

ACAHO, in principle, supports a Pan-Canadian health human resources strategy to make Canada self-sufficient in producing an adequate supply of health human resources. This would include the creation of a pan-Canadian body or coordinating mechanism for health human resources.^x There is also a strong consensus by the Canadian Medical Forum as well as Task Force Two that such a body is urgently required.

In addition, more needs to be done in terms of the federal government working with provincial and territorial governments to invest in the relationship between the number of students enrolled in the Faculties of Medicine and Health Sciences, and their requisite training positions.

Notwithstanding the policy issues related to accessing health care providers on a timely basis - which is essential to the mission & mandate of teaching hospitals, ACAHO is also concerned about the system’s *capacity* to train an adequate number of health care professionals. Keep in mind that health care professionals’ hands-on experience is largely within teaching hospitals/centres.^{xi} This latter point underscores one essential role of teaching hospitals/centres in Canada – which provides virtually all post-graduate health care professional training infrastructure.^{xii}

Our view is that investing in physical infrastructure is a critical success factor that must go hand-in-hand with future health human resource planning requirements. Recently, this issue was explicitly recognized in the Task Force II Final Strategy report: “*To ensure that Canada can achieve and maintain a medical workforce in a responsible and ethical manner, plan and fund the requisite infrastructure and resources (human and non-human) of the medical education, training and continuing learning systems, and make all components socially accountable.*” The paper also

recognizes the importance of health information technologies, medical technologies and physical infrastructure as tools that can assist providers in working more effectively.^{xiii}

Thus, while there is a growing consensus that Canada's health system will have to increase the range of training slots for health care professionals, members of ACAHO will have to absorb a significant increase in operational and infrastructure costs to train new recruits. Overhead costs include the requisite costs to support education which includes funding for instructors, space, overhead and supplies.

As a national resource in the system, members of ACAHO believe that there is a crucial role for the federal government in terms of financially assisting teaching hospitals/centres in expanding their capacity to train a growing cohort of health care professionals in their institutions.^{xiv}

Moreover, there is clear precedent for the federal government to become more active in this area, and to work in close collaboration with the provinces and territories with the establishment of the *Health Resources Fund Act* of 1966 – which was valued at \$500 million.^{xv}

Recommendation #1

*That the federal government, working in close collaboration with the provinces and territories, establish a **National Health Human Resource Fund** to build capacity to educate and train Canada's health care professionals.*

2. INFORMATION TECHNOLOGIES, THE EHR & HEALTH SYSTEM INNOVATION

While there is a consensus about the need to accelerate the pace of reforming the health system, much is contingent on how we collect, manage and integrate information more effectively (e.g., from more cost-effective clinical decisions to better wait time management processes). Thus, an important element in the renewal of the system is having state-of-the-art information technologies at hand. EHRs can also play a vital role in making sure that patients, and their case histories are “portable”.

In recognition of this need, the federal government created Canada Health Infoway (CHI) – which is tasked with creating a pan-Canadian inter-operable electronic health record (EHR) to support a safer and more efficient health system across at least 50% of Canada population by 2009.

Importantly, these issues have been fully recognized by The Honourable Tony Clement, Minister of Health, who said: *“In short, our investments in Infoway are harnessing your industry's technology to increase productivity, enhance safety, improve information sharing and delivering better, more timely access to care for all Canadians, no matter where they live...The exciting potential of information and communications technology to transform Canada's health system is the kind of news that should give Canadians greater optimism about the prognosis for its speedy recovery.”*^{xvi}

More recently, at a meeting jointly hosted by Canada Health Infoway and the Health Council of Canada, international experts agreed that there will be no quantum leap forward in health care quality and efficiency without high quality, user-friendly electronic health information.^{xvii} The electronic health record leads to safer, higher quality, and more efficient care. As well, the electronic health record also saves time for healthcare providers and makes the healthcare experience more convenient for patients.

Further, the report of the Federal Advisor on Wait Times recommended that the federal government invest an additional \$2.4 Billion over the next 5 years in information technologies to accelerate the implementation of wait time tools across the country.

A recent study has estimated that the investment in CHI has the potential to generate an annual savings of \$6.1 billion *annually* to the health system. This is the kind of cost-benefit analysis that supports the completion of CHI mandate as expeditiously as possible. “Information technology initiatives are costly to implement, but the resulting efficiencies and rebuilding of public confidence will mitigate the expense.”^{xviii}

To date, CHI has received an investment of \$1.2 billion. By March 2007, CHI will have approved over \$1.0 Billion or 85% of its funding. However, it is estimated that it will cost CHI \$4.1 billion to fulfill their mandate. With CHI assuming 75% of the eligible costs, this means that it will require a total public investment of approximately \$3.0 billion, or an incremental \$1.8 billion.

Recommendation #2

That the federal government invest an additional \$1.8 billion (\$600 million over the next three years) to accelerate the work of Canada Health Infoway.

3. (RE)BUILDING SYSTEM DELIVERY CAPACITY

In 1948, the federal government established the *Hospital Construction Grants Program*. The purpose of this program was to make available grants to the provinces and territories that would cover the cost of building new hospitals. This initiative – designed to build physical capacity in the system to deliver timely care – was seen as a vital precursor to the development of first-dollar coverage for hospital-based services through the *Hospital Insurance and Diagnostic Services Act*, and what we now know as Medicare.

Today, the national policy discussion about the future of the health system is largely concerned with the “operational” resources that are needed to provide Canadians with access to a range of quality health care services. As vitally important as this is, it is equally essential that we consider the state of the system’s delivery capacity (i.e., infrastructure), and what is required for the future knowing that much of our acute care institutional capacity was built around the turn of the century.^{xix}

In the view of ACAHO, the current stock of institutions remains under-funded and depreciation is not fully recognized by the federal or provincial governments from a funding perspective. As a result, hospitals have limited resources to either upgrade their facilities, or if required expand capacity (for example, in Ontario alone, hospital capital investment modernization and capacity expansion requirements have been conservatively estimated to be between \$7.0 and \$9.0 billion).^{xx}

Consequently, many capital investment decisions appear to be based on short-term needs rather than a long-term planning horizon. In some cases, additions or renovations are made to old structures, when full reconstruction might have been a more appropriate policy decision.^{xxi}

In this context, ACAHO strongly supports federal resources that would be targeted to assist teaching hospitals/centres in renewing their delivery infrastructure and enhance their capacity and ability to meet their mission and mandate as a national resource in the system.

Such a time-limited initiative would be complementary to the federal government's current Infrastructure Program (for roads, highways, bridges, etc.), funding for health research infrastructure (via the Canada Foundation for Innovation), and an environmentally sustainable approach to issues. Given that many institutions are beyond their life expectancy, we believe it is timely and appropriate for the federal government to establish a mechanism that would assist the health community in replenishing and adding to the system's physical capacity – and help (re)build many of the institutions that were originally funded through the *Hospital and Construction Grants Program* – and to ensure that Canadians have access to world-class facilities in times of need.

Recommendation #3^{xxii}

*That the federal government create a one-time **Health Delivery Infrastructure Fund** to assist teaching centres/hospitals (re) build their delivery capacity to provide timely care to Canadians.*

4. STRENGTHENING PUBLIC HEALTH CAPACITY

Members of ACAHO are actively pursuing a number of public health initiatives, many of which include cutting edge research and the development of innovative public health networks. A recent publication of the Association, *Ounces and Pounds: ACAHO Member Investments to Address Infectious Diseases and Emergency Preparedness*, outlines measures ACAHO members have taken to improve the responsiveness and effectiveness of the health system in general - with Canadians being the ultimate beneficiary. Explicit processes and programs which have been developed to improve public health across the country serve to *improve the transparency* of decision making processes in times of crisis, and clarify many of the *accountability* relationships when it comes to public health emergency planning.^{xxiii} In short, as much as we think about public health in a *national* context, we need to ensure that we have the resources and processes in place to act *locally*.

Recently, the 2006 budget committed \$1 billion over five years to further improve Canada's pandemic preparedness - \$600 million to be allocated between the Public Health Agency (\$367 million over five years or \$73.4 million annually), the Canadian Food Inspection Agency (\$195 million over five years), Health Canada (\$16.5 million over five years) and the Canadian Institutes of Health Research (\$21.5 million over five years) for a variety of pandemic preparedness activities. A \$400 million contingency was established for access on an as-needed basis, if a pandemic were to occur.

A further financial commitment from the federal government would underscore the importance that ACAHO and others place on investments in health promotion and prevention, and increasingly healthy lifestyle choices. In the view of ACAHO, a balance between both is required; a strong public health system is vital to an effective health care system.^{xxiv}

Recommendation #4

That the federal government increase core funding for federal public health functions by an additional \$525 million annually to facilitate a coordinated and comprehensive response to the public health needs of Canadians by all levels of government and non-government organizations.

4. RESEARCH EXCELLENCE, INNOVATION & COMMERCIALIZATION... DRIVERS OF FUTURE PROSPERITY

In the view of ACAHO, research is the oxygen of an evidence-based health system. It is the basis on which many sound public policy decisions are based. It is the backbone of a health system upon which cost-effective clinical and/or administrative decisions are taken.^{xxv}

Research is the foundational building block that facilitates innovation in at least three dimensions, it: (1) contributes to improving the individual and collective health status of Canadians; (2) impacts on the architecture of the health system and the manner in which we deliver a range of cost-effective health services; and (3) produces leading-edge, world class discoveries that provide opportunities to leverage major economic benefit as well as health gains.^{xxvi}

These three points were captured in the text of the 2004 First Ministers' Agreement: "*A strong, modern health care system is a cornerstone of a healthy economy. Investments in health system innovation through science, technology and research help to strengthen health care as well as our competitiveness and productivity. Investments in science, technology and research are necessary to develop new, more cost-effective approaches and to facilitate and accelerate the adoption and evaluation of new models of health protection and chronic disease management. Recognizing the progress that has been made, the federal government commits to continued investments to sustain activities in support of health innovation.*"^{xxvii}

1. REFLECTING ON CANADA'S RESEARCH ENTERPRISE

At this point in time, the federal government has initiated a review of a number of programs and bodies that play a crucial role in supporting the country's research enterprise (e.g., Indirect Costs, Canadian Institutes of Health Research, Genome Canada, Tri-Council Review, and the development of Science & Technology Strategy).

While it is premature to determine the results of the reviews and future directions, when it comes to supporting the health research enterprise the Association continues to support the underlying principles of: (1) *excellence* in research; (2) effective *alignment* and where appropriate *integration* of federal funding instruments; (3) a clear *strategic* focus for all programs and bodies; and (4) *efficient* and *accountable* management processes. ACAHO believes that these foundational principles should contribute to the organization, funding, management and outcomes of research well in the future.

2. LOOKING TO THE FUTURE

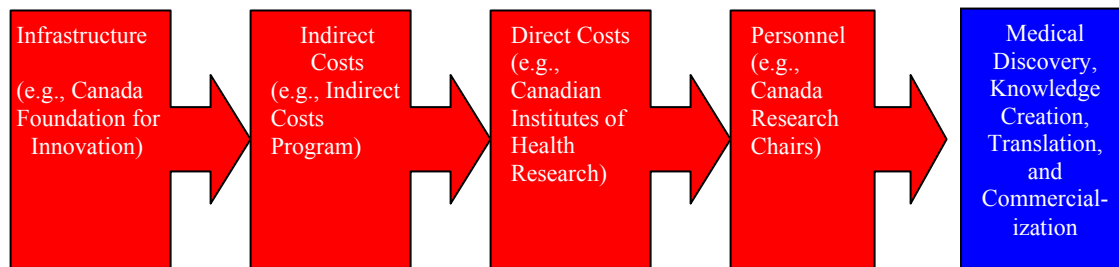
Given this "pause", the key policy question is how to identify and execute an effective and integrated strategic approach that fully leverages our public and private investments in the health research enterprise. Since the fruits of research are not borne overnight, it is important for the federal government to appreciate that a sustained long-term approach to investing in health research is an absolute requirement.

In reviewing the health research enterprise in Canada, the federal government has played a strategic role in five key areas (see Figure 1). Specifically, public (federal) investments in health research focus on a "value chain of inputs" – from physical infrastructure (research facilities), indirect costs (the costs of maintaining research facilities), and direct costs (basic research materials), to research personnel or human capital (research clinicians, etc.) – that produce a

number of outputs in terms of medical discovery, knowledge creation and translation, innovation and the process of commercialization in Canada.

From the perspective of ACAHO, the research, innovation and commercialization process is an essential component, and a distinguishing feature of our members' mission and mandate. Members play an essential role in the advancement of health research, medical discovery, knowledge creation and innovation in Canada. In fact, teaching hospitals/centres and their research institutes account for a large proportion of the physical infrastructure that supports Canada's health research community.^{xxviii}

Figure 1
The "Value Chain" for Health Research



If we are to continue to move the yardsticks forward and maximize our health and economic "return-on-investment", we need to ensure that all components of the research equation are funded at appropriate levels. Furthermore, investments in one area should not be viewed as a zero-sum game where less funding is subsequently available for other inter-locking elements of the research enterprise. What is required is a *balanced* and *strategic* approach to advancing Canada's health innovation agenda.

Given the breadth and depth of health and research investments by the federal government, one might be tempted to say that the time has come to address other important national priorities. ACAHO maintains that while the "tide has turned" through enhanced investments in Canada's health research enterprise, we must continue to sustain the momentum that we have created so that we can continue participate in the benefits that come from future world class research findings. Understanding that the research and discovery process can take time, we must continue to "till the soil" if we are to fully harvest the fruits of our labor – and remain as a world leader.^{xxix}

Knowing that we are on the threshold of a biotechnology revolution, in addition to other advances in health research (e.g., nanotechnology, robotics, population and public health, health services), ACAHO is concerned that any retrenchment in funding the health research enterprise would have serious consequences on our ability to attract and retain world class researchers – not to mention our ability to advance the process of discovery and innovation. Indeed, we have created an entire Biotechnology industry that has spun out of our universities and affiliated teaching hospitals and research institutes. Let's not go backwards.

A move away from commitments to funding research, innovation and commercialization, will result in Canada falling out of step with those countries that place tremendous value on the linkages between creating knowledge and its spin-off effects – particularly in a global economy that competes on the advancement and translation of knowledge.

Importantly, each of the impacts of health research noted above are mutually reinforcing and are built on the publicly funded and administered platform of our health system. This alone presents

Canada with a very unique opportunity to continue to harness the multiple benefits that flow from health research and innovation.

Given these linkages, ACAHO has identified three specific areas where the federal government can continue to make an important difference, and accelerate its role in advancing the health, social as well as economic benefits of health research: (1) basic and applied health research; (2) health research infrastructure; and (3) maximizing the full economic potential of innovative health research.

3. BASIC AND APPLIED HEALTH RESEARCH

The Canadian Institutes of Health Research

The Canadian Institutes of Health Research (CIHR) is the country's premiere funding Agency for health research. While there have been significant increases in CIHR's budget over the past few years, including an additional \$17 million in the Spring 2006 Budget, ACAHO is strongly supportive of a multi-year fiscal framework that will increase its base by \$350 million over the next 3 years to approximately \$1.1 billion by 2009/10.

At the same time, however, the Association is also supportive of targeted envelopes of funding that CIHR would administer that are issue-specific and strategically focused, such as in wait time benchmarks, research on the environment and health, mental health and other issues of importance to Canadians.

Recommendation #5

That the federal government increases the base budget of the Canadian Institutes of Health Research (CIHR) by \$350 million over the next 3 years, and consider targeted funds that are issue-specific and strategically focused.

It is our expectation that CIHR could invest these base funds into the following strategic areas: (a) maximize the health and economic benefits of Canadians; (b) develop national research platforms and initiatives; (c) support people, talent and tools that contribute to a more productive and cost-effective health system, and productivity and economic growth; (d) and strengthen Canada's research core. Combined, these investments will support a Canadian research community that is a world leader in health research and one that is strategic, responsive, and focused, and is ready to deliver leading edge outcomes that matter to Canadians (i.e., improved health status and outcomes; a stronger and sustainable health system, and contributing to a vibrant and prosperous knowledge-based economy in the 21st Century).

The final report, released last June, applauded CIHR for what has been accomplished to date, noting that Canada is setting an example to the world. It also recognized CIHR's focus on outcomes, multi-disciplinarity and teamwork as ground-breaking.

In light of the Government's focus on accountability, last year, CIHR's Governing Council commissioned its first International Review. ACAHO believes that this objective assessment by an outside group of the world's leading researchers demonstrates that renewed investments in CIHR make good public policy sense.

As noted by Minister Clement, "...research, the government has committed to increase investment in this area. Mr. Speaker, I do not have to tell you that solid research evidence helps build consensus among the many different groups involved in health care...The government is

convinced of the importance of research and will apply clinical results to an action plan for health care. This will improve the lives of all Canadians.”^{xxx}

Such an increase in base funding would not only improve the number of excellent research proposals that have yet to qualify for funding, but it would also improve the linkages between enhancements in the country’s research infrastructure and operating grants.

4. HEALTH RESEARCH INFRASTRUCTURE

Indirect Costs of Research

In its 2003 budget, the federal government responded to the concerns expressed by ACAHO, the AUCC and others by creating a permanent fund to address the indirect costs associated with universities, colleges and research hospitals (subject to a three-year review). Budget 2006 provided increased funding for the Indirect Costs Program in the amount of \$40 million per year, raising the program’s funding from \$260 million in 2005/06 to \$300 million in 2006/07.

ACAHO strongly applauds the federal government for its incremental investment and would encourage the federal government to continue to augment the value of the program so that it is funded at an appropriate international competitive level to reflect the input costs associated with undertaking world-class research within an increasingly competitive global environment. Further, that this component of innovation is not a rate limiting step to achieving excellence. This point was recognized as part of the three-year review of the Indirect Costs program.^{xxxi} ACAHO has been consistently of the view that it supports a proportion of 40% - which is intended to reflect the operating costs associated with federal funded research.

Recommendation #6
That the federal government increase funding available for the indirect costs associated with research funded by the three federal Granting Agencies from \$300 million to \$450 million (40%), effective 2007/08.

Canada Foundation for Innovation

From the perspective of ACAHO, the Canada Foundation for Innovation (CFI) has played a critical role in rejuvenating the country’s health research infrastructure and thereby enabled leading edge research which could not have otherwise been undertaken. Since its creation in 1997 with an endowment of \$3.65 billion, the Foundation, on average, invests \$400 million a year in building world class research facilities. Given the funds that have been allocated by CFI to date, it will award only \$200 million per year until the end of its mandate – which is scheduled to wind down in 2010.^{xxxii}

Budget 2006 acknowledged the investments of CFI in leading edge equipment and facilities and announced an additional \$20 million per year for the Leaders Opportunity Fund. While this funding is welcomed, the reality, however, is that the remaining CFI funds (with the exception of the Research Hospital Fund and the Leaders Opportunity Fund) will have been effectively awarded by mid-2006. Without a commitment, or at a minimum a signal, by the federal government for additional funding for CFI, institutions will not be in a position to undertake the planning for any additional infrastructure projects given the timelines required for these complex applications and the design, building and commissioning of the facilities.

In order to continue the significant momentum that has been created by CFI, it is the view of ACAHO that the federal government take the appropriate steps now to further invest in research infrastructure through CFI in 2006.

Recommendation #7

That the federal government take the appropriate steps to invest \$1.0 Billion in support of world class research infrastructure through Canada Foundation for Innovation (CFI) in 2007.

3. MAXIMIZING THE FULL ECONOMIC POTENTIAL OF INNOVATIVE HEALTH RESEARCH

As we consider the future of Canada's health care system, the role of health research has largely been framed in the context of how it contributes to improving our individual and collective health status, identifies new and more cost-effective ways of delivering/administering health care services, and is a key driver behind our desire to continue to develop and implement a quality-focused, evidence-based culture.

In its broadest form, these innovative approaches include the design and introduction of new: diagnostic and therapeutic technologies and medical devices; management techniques and processes; modified construction engineering techniques; financing for improved management practices (e.g., supply chain purchasing); and health and bio-informatics systems.

There is another essential dimension of the health research and innovation equation that demands our close attention, and that has to do with the important economic development benefits that can accrue to Canadians – both at the individual and societal level. Thus, are their mechanisms that we can invest in that allow Canadians to increasingly own the factors of production (i.e., land, labour, capital and entrepreneurship) such that we can reap the economic rent that accrues from world class, leading edge innovations, while improving our quality of life, as expressed by Tom Courchene.^{xxxiii} Keep in mind that over the next decade, we will invest roughly \$1.0 trillion dollars in our publicly funded health system.

In this context, investments in health research are investments in health, health care and sustained economic prosperity (i.e., nation-building). They should be viewed as mutually reinforcing public policy objectives that can add significant value to our overall quality of life.^{xxxiv}

In more concrete terms, ACAHO is supportive of initiatives to commercialize research that recognize the unique potential and environment that resides within teaching hospitals/centres and their research institutes. These initiatives should embrace the many dimensions of innovation that stem from health research and move through the stages of development, testing, production, financing and marketing. Importantly, initiatives must play an important role in developing a coordinated and integrated strategic plan that would nurture specific areas where Canada has a comparative advantage in health research and development.

In this light, it will also be critical that we have the necessary human capital, physical infrastructure and linkages to the private sector to take full advantage of our opportunities.

Given where the large majority of Canada's health research and commercialization capacity rests, teaching hospitals/centres have a vital role to play when it comes to harnessing the full value of health research and development. More particularly, when it comes to technology transfer and economic development opportunities, many teaching hospitals/centres have increasingly developed effective relationships with industry and venture capitalists.

ACAHO strongly supports the development of health research networks focused on commercialization – which include investments in human capital development and receptor capacity-building.^{xxxv}

Recommendation #8

That the federal government – as it continues to support initiatives that accelerate the commercialization of (health) research – must take into account the unique characteristics of Canada’s Teaching Hospitals/Centres and their Research Institutes, and the role they play in the commercialization process.

Given the shared ownership of developing policies that focus on “health and wealth”, ACAHO would encourage deeper and more effective relationships between Health Canada and Industry Canada on these files.

5. TAX POLICY & HEALTH POLICY...ALIGNING INCENTIVES

1. ADMINISTRATION OF THE GST/HST REBATE FOR PUBLIC HOSPITALS

Currently, public hospitals in Canada are eligible for an 83% rebate on GST paid while other parts of the health system (e.g. not-for-profit long-term care facilities and many home and community care services; and health research) are eligible for a 50% rebate. While some health sector purchases are exempt or zero-rated, there are still many purchases that attract GST, to which the rebate system applies. The challenge, therefore, has been to define which purchases are eligible for the hospital rebate.

In recent months, ACAHO has met with senior officials from the Canada Revenue Agency to discuss the tax implications on members. In June 2006, Minister Skelton indicated her commitment as well as that of the Canada Revenue Agency, to working with ACAHO members to ensure that “*the administration of the GST/HST is carried out in a fair, transparent manner that reflects the changing nature of the health sector.*”^{xxxvi}

Minister Skelton confirmed that the CRA will ensure that the 83 percent rebate is applied as broadly as possible within the legislative framework of the Excise Tax Act. To date, ACAHO is encouraged by the response of the Canada Revenue Agency and looks forward to resolving this issue.

Recommendation #9

That the federal government increase the GST rebate under the MUSH Formula for eligible hospital authorities to 100% of eligible input costs.

6. IN CLOSING...

As outlined by the Standing Committee on Finance, the Association looks forward to participating in a national dialogue to position Canada as a global leader within a competitive world economy through a series of interlocking policy measures that support the twin policy objectives of improved health and health care for all Canadians, and a more robust, innovative and productive society.

ENDNOTES

ⁱ The House of Commons Standing Committee on Finance identified the following four questions: “(1) *What specific federal tax and/or program spending measures should be implemented in the upcoming budget to ensure that our citizens are healthy, have the right skills, etc. for their own benefit and for the benefit of their employers?*, (2) *What specific federal tax and/or program spending measures should be implemented in the upcoming budget to ensure that our businesses are competitive?*, (3) *What specific federal tax and/or program spending measures should be implemented to ensure that our nation has the infrastructure required by citizens and businesses?*, and (4) *What specific federal actions should be taken to ensure that the government is able to afford the tax and/or spending measures needed to ensure that Canada’s citizen’s and businesses can prosper in the world of the future?*”

ⁱⁱ ACAHO Welcomes Significant Progress on Wait Time Benchmarks. ACAHO News Release, December 12, 2005.

ⁱⁱⁱ Postl B. *Final Report of the Federal Advisor on Wait Times*. June 2006.

^{iv} OECD Health Data 2006: A Comparative Analysis of 30 Countries.

^v *Wait Watchers II: Measuring Progress on Wait Time Strategies Across ACAHO Members*. ACAHO, March 2006.

^{vi} Remarks made by The Honourable Tony Clement, Minister of Health in the House of Commons, April 12, 2006.

^{vii} For example, there is broad consensus among medical groups that the number of undergraduate medical school positions should be increased from 2,250 to 2,500 per year. The Canadian Medical Association (CMA) has indicated that a target of 3,000 undergraduate medical school positions may be reasonable given the increasing demand for health care and the changes in the medical workforce. According to the Canadian Nurses Association (CNA), the number of nursing seats needs to increase to 15,600 annually; Canada currently graduates approximately 8,000 registered nurses per year.

^{viii} Remarks made by The Honourable Tony Clement, Minister of Health in the House of Commons, April 12, 2006.

^{ix} The Minister stated “*Our government is also investing in health human resources to improve collaboration among health professions, and to contribute to the recruitment and retention of health professionals. This government is also investing to help increase the number of internationally educated health professionals who are able to work in Canada. These investments will mean 1,000 more doctors, 800 more nurses and 500 other health professionals in the system within five years.*” Speech to the Canadian Medical Association Annual General Meeting. August 21, 2006.

^x ACAHO reply to the Federal-Provincial-Territorial Advisory Committee on Health Delivery and Human Resource consultation paper “*A Framework for Collaborative Pan-Canadian Health Human Resources Planning*”, March 29, 2006.

^{xi} For example, in Ontario it is estimated that over 90% of Residents and 99% of Fellows are trained in our members institutions. Source: Council of Academic Hospitals of Ontario, April 2006.

^{xii} The term “Infrastructure” includes elements such as: physical plant (housekeeping, maintenance); support departments (information systems, library resources, occupational health, etc.); medical education office, and general supplies (gowns, scrubs, pagers, etc.).

^{xiii} Task Force II Final Strategy Report, April, 2006.

^{xiv} Assuming that we need to increase the number of new physicians by a range of 640 to 1,140 (as recommended by the Association of Canadian Medical Colleges), and the need to address current and looming shortages in nursing, pharmacy and the other health care professions, ACAHO has estimated that the additional costs associated with increases in health care training positions over the course of their training cycle is in the \$300 million to \$550 million range. Taking a mid-point of \$425 million, this would require an annual investment of \$85 million over the next five years. This issue was also specifically acknowledged by the Senate Standing Committee on Social Affairs, Science and Technology’s final report on “*The Health of Canadians – The Federal Role*. The recommendation is worded as follows: “*The federal government devote \$75 million per year of the new money the Committee recommends be raised to assisting Academic Health Sciences Centres to pay the costs associated with expanding the number of training slots for the full range of health care professionals.*” *The Health of Canadians – The Federal Role*. Volume Six: Recommendations for Reform, Page 198.

^{xv} The *Health Resources Fund Act* states that the federal government will make a contribution towards the cost of planning or designing any health training facility in that province, not exceeding fifty percent of the reasonable cost as determined by the Federal Minister of Health, and/or a contribution towards the cost of acquiring, constructing or renovating any building for use as a health training facility in that province, not exceeding fifty percent of the reasonable cost as determined by the Federal Minister of Health.

^{xvi} The Honourable Tony Clement, Minister of Health and Minister Responsible for the Federal Economic Development Initiative for Northern Ontario. Address to the Information Technology Association of Canada Board of Directors. April 11, 2006.

^{xvii} *Beyond Good Intentions: Accelerating the Electronic Health Record in Canada*. June 11-13, 2006. Montebello, Québec. Hosted by Canada Health Infoway and the Health Council of Canada.

^{xviii} Final Report of the Federal Advisor on Wait Times. June 2006. Page 13.

^{xix} The challenges associated with this issue are underscored by the following: (a) Between 1982 and 1998 real public per capita expenditures on new hospital construction decreased from \$50 to \$2, or 5.3 per cent annually, and (b) From 1998 real public per capita expenditures on new hospital machinery and equipment has fallen by 1.8 per cent annually.

Specialty Care in Canada – Issue Identification and Policy Challenges. Canadian Medical Association, September, 2001, page 15.

^{xx} Ontario Hospital Association. *Capital Planning and Investment in Ontario's Hospitals*. November 2003.

^{xxi} The Conference Board of Canada reports that for every \$1.0 million invested in non-residential construction, 15-20 man-years of work is generated. The spin-off to the community is significant, and the multiplier effect of each dollar that stays in the local economy can be as high as 12 times.

^{xxii} This recommendation was supported by the findings of the Senate Standing Committee on Social Affairs, Science and Technology – which recommended that “*The federal government contribute \$4.0 billion over the next 10 years (or \$400 million annually) to Academic Health Sciences Centres for the purpose of capital investment.*” *The Health of Canadians – The Federal Role*. Volume Six: Recommendations for Reform. October 2002, page 53.

^{xxiii} *Ounces and Pounds: ACAHO Member Investments to Address Infectious Diseases and Emergency Preparedness*. ACAHO, June 2006.

^{xxiv} The Naylor Committee recommended 5% of total health spending (public and private) be directed towards public health. In 2005, where total health spending in Canada is estimated to reach \$142 billion, 5% of this total would suggest \$7.1 billion should be dedicated to public health initiatives. As of 2005, the federal government provided approximately \$500 million annually to fund activities associated with the Public Health Agency of Canada. Dr. Naylor recommended an additional \$700 million of funding annually for public health infrastructure and programming in four related areas. As of Budget 2006, \$173.4 million has been committed, an additional \$525 million annually \$73.4 million annually to facilitate a coordinated and comprehensive response to the public health needs of Canadians.

^{xxv} A recent survey released by ACAHO (“*A View from the Top...A Survey of ACAHO Presidents & CEOs*”) found that 100% of members of the Association considered the federal role in health research to be “important” or “very important”. July 2006.

^{xxvi} Brimacombe GG. *Health, Healthcare and Nation-Building: A Three-Dimensional Approach to Innovation in Canada*. Healthcare Quarterly, Vol. 8, No. 3, 2005.

^{xxvii} *A 10-Year Plan to Strengthen Health Care*, First Ministers, September 14, 2004.

^{xxviii} Members of ACAHO account for 25% of the funding Canada's health research enterprise (in addition to government funds). Furthermore, approximately 80% of public monies invested in the health research enterprise occur in our members' institutions and research institutes. As a result, it is estimated that 70%-80% of all health research is conducted in teaching hospitals/centres. Source: *Strengthening the Foundation of Canada's Health Research Enterprise: A Backgrounder*. Prepared by the Leaders' Forum on Health Research in Canada Steering Committee, September 8, 2004.

^{xxix} ACAHO is developing a compendium of major medical discoveries, or “World's Firsts” which have resulted from health research as it is carried out in Canada's Teaching Hospitals and Academic Regional Health Authorities and their related Research Institutes. This report will express the value that investments to health research in Canada provide to Canadians, the nation as a whole, as well as internationally with respect to the discovery of new medical devices, pharmaceuticals, treatment protocols, etc. which ultimately improve the quality of health services.

^{xxx} Remarks made by The Honourable Tony Clement, Minister of Health in the House of Commons, April 12, 2006.

^{xxxi} In the “*Third Year Review of the Indirect Costs Program*”, recommendation #4 in the final review report states “*Establish a specific rate of indirect costs (higher than the 2003/04 rate) in order to ensure a stable funding level...A stable rate of indirect costs (calculated as a percentage of direct cost funding) should be maintained in order to achieve program objectives, and allow institutions (particularly large institutions) to plan their expenditures.*” R.A. Malatest & Associates Ltd, January 3, 2005.

^{xxxii} Over the first eight years, the CFI invested an average of \$400 million per year in research infrastructure - a ratio of 27% of CFI infrastructure funding to federal funding agencies investments in research (i.e. CIHR, NSERC and SSHRC). In absence of further investment, it is expected that this ratio will fall to 11% over the next four years. For Canada to remain competitive in world-class research and technology development, the ratio of CFI infrastructure funding to federal funding agencies should be raised to at least 20%. This would require an additional \$1.0 billion in CFI funding between now and 2010.

^{xxxiii} *Among the many promising industrial sub-sectors subsumed within healthcare are information technology; biotechnology; health care diagnostic, treatment and delivery services; health care management; knowledge/information management systems (including data collection and software development); and imaging systems. These are also leading-edge sectors for employing our high-level human capital and talent, an essential requisite if we wish to become a knowledge-based economy and society. However, there is much more at stake here than merely missing out on a major export platform in the information era: Failure to be in the forefront of these remarkable diagnostic, treatment and service-delivery innovations will mean that we will assuredly fail in our objective to ensure that Canadians will have access to state-of-the-art health care.*” Courchene TJ. *Medicare as a Moral Enterprise: The Romanow and Kirby Perspectives*. Institute for Research on Public Policy, page 12, 2003.

^{xxxiv} For example, the recent Neomed Pharmaceuticals agreement with Merck Frost was valued at \$475 million (US), and is billed as the largest biotechnology licensing deal in Canadian history. It is worthwhile noting that the origins of this work came from Dr. Terry Snutch at the University of British Columbia which was funded by the

Canadian Institutes of Health Research (CIHR). It is this kind of example where multiple “wins”, in addition to public policy objectives, are achieved.

^{xxxv} In 2004, the federal announced \$50 million to seed pilot projects for commercialization. As we move forward to invest in a number of pilot projects it will be important to support the unique characteristics that Canada’s teaching hospitals/centres bring to the process of commercialization.

^{xxxvi} Letter sent by the Minister of National Revenue to Provincial & Territorial Ministers of Health. June 2006.