

Canadian Academy of Health Sciences
Global Health Symposium

Canada's Strategic Role in Global Health

Meeting Summary

September 21, 2009

Symposium Chair:

Dr. Peter A. Singer

Table of Contents

A. INTRODUCTION	3
B. HISTORICAL PERSPECTIVES ON CANADA’S ROLE IN GLOBAL HEALTH	4
C. INSTITUTE OF MEDICINE REPORT “THE US COMMITMENT TO GLOBAL HEALTH”	6
D. WHAT CAN THE GOVERNMENT OF CANADA CONTRIBUTE TO CANADA’S STRATEGIC ROLE IN GLOBAL HEALTH?	8
E. WHAT CAN UNIVERSITIES, CIVIL SOCIETY AND INDUSTRY CONTRIBUTE TO CANADA’S STRATEGIC ROLE IN GLOBAL HEALTH?	11
F. INTERNATIONAL RESPONSE PANEL	14
G. CONCLUSION	15
ANNEX I: AGENDA (INCLUDING SPEAKERS AND PANELISTS)	17
ANNEX II: ANALYSIS OF CANADA’S INVESTMENT IN GLOBAL HEALTH	18

A. Introduction

On September 21, 2009 the Canadian Academies of Health Sciences brought together more than 150 of its members and other global health experts for a day-long symposium entitled *Canada's Strategic Role in Global Health*. The purpose of this symposium was to engage Canadian and International experts in Global Health from the Public, Private and Not for Profit sectors to discuss two important questions:

- What is Canada's strategic role in global health?
- What should it be?

The symposium began with a welcome from Dr. Martin Schechter, President, Canadian Academies of Health Science and an introduction by Dr. Peter Singer, Foreign Secretary, CAHS and Director of the McLaughlin-Rotman Centre for Global Health (for a complete list of Symposium speakers please see Annex I).

In his introduction, Dr. Singer highlighted the increasingly global nature of health challenges – H1N1, for instance – and the fact that these health challenges have a particularly profound impact in the developing world. Despite the severity of the global health challenges facing developing and emerging market countries, over 90% of the world's health research is targeted at diseases and conditions that primarily impact on only 10% of the world's population.

Dr. Singer continued by discussing Canada's current investment in global health of ~\$550M per year. He outlined that approximately half of this investment is made in health systems, with ~45% in health innovation and about 5% in health security¹. The bulk of this funding is targeted at diseases such as HIV/AIDS, malaria, polio and tuberculosis through bi-lateral and multi-lateral funding programs and at specific regions through programs such as the Catalytic Initiative to Save a Million Lives.

Given this level of interest and investment, it is unusual that there has never been a concerted effort to look at these programs in a broader strategic context in order to answer the following basic questions:

- Are these the most strategic investments that Canada can make in global health?
- Are there other, more effective policy choices that could be taken in directing Canada's global health investments?
- Are there opportunities to better align Canada's investment both domestically and internationally to deliver superior outcomes?

Dr. Singer continued his introduction by outlining the specific meaning of the term "strategic" in the context of Canada's role in Global Health. He proposed that a strategic role for Canada would meet the following criteria, it would:

¹ Please see *Analysis of Canada's Investment in Global Health* included as Annex III

- Address real needs;
- Leverage Canada’s comparative advantage;
- Identify and build on synergies in Canada;
- Encourage and enable partnerships;
- Show a fundamental respect for colleagues in the developing world;
- Have an outcomes orientation with clear metrics for success; and
- Establish a clear brand for Canada.

Dr. Singer identified the following specific outcomes for the symposium, it should:

1. Build interest and a recognition of both the importance of and the need for discussion around the question of Canada’s strategic role in global health;
2. Start to shape the answer to the question of Canada’s strategic role in global health; and
3. Address the current fragmentation in global health research and establish a basis for a possible future assessment of Canada’s strategic role in global health by the CAHS.

Other nations including the United States and United Kingdom have explicitly explored and developed their own strategies in global health and it was suggested that Canada should do so as well.

Dr. Singer drew attention to the draft commentary distributed to meeting participants by Richard Horton², the editor of *Lancet*. This was an example of how Canada has a real opportunity to shine the spotlight on global health challenges as all eyes will be on Canada this year as a result of its presidency of the G8 meeting.

B. Historical Perspectives on Canada’s Role in Global Health

Chair: Elizabeth Dowdeswell

Panelists: Janet Hatcher-Roberts (CSIH), Victor Neufeld (CCGHR/McMaster U), Frank Plummer (U Manitoba).

The purpose of the first panel session was to explore historical perspectives on Canada’s role in global health. Victor Neufeld began the session with a discussion of the Report of the Commission on Health Research for Development, which was written in 1990. This report found that there is a significant misalignment between the burden of global disease and investments in global health. The report stated that:

- Low and medium income countries bear about 93% of global health burden; and
- Global health systems are characterized by inequity.

The report also found that there is a great deal of fragmentation in global health research and weak capacity in many countries to implement global health solutions. Dr. Neufeld then outlined how there was a meeting in 2000, in Bangkok, to assess progress against the report’s recommendations. Of the 800 participants at this session, only seven were Canadian and the meeting concluded that many if not all of the recommendations remained unfulfilled.

² [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61677-9/fulltext#article_upsell](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61677-9/fulltext#article_upsell)

Since 2000, however, a lot has happened including the creation of the Global Health Research Initiative³ funded by CIDA, IDRC, HC, CIHR and PHAC. This initiative has been a success, as demonstrated by the growing number and interest of international participants (over 40% of the participants are international) and it is being considered as a model by Norway, Denmark and by a number of other countries. He concluded by suggesting that there is still too much fragmentation in global health research and that the Academy's interest and activities in global health research need to be scaled up.

Frank Plummer discussed the important role for Canadian universities in addressing global health challenges. By way of example, he discussed the work of Dr. Allan Ronald and colleagues (including Dr. Plummer) at the University of Manitoba and the impact of their ongoing research project in Nairobi. Even with a very small budget of less than \$0.5m a year, this research project has had a significant scientific and human impact by conducting research in a wide range of areas including; the impact of male circumcision and breast feeding on the spread of HIV, and HIV resistance in sex workers. Dr. Plummer concluded by suggesting that there is a need for greater investment in health research in terms of the discovery of new knowledge and the development of new products and services targeted specifically at the challenges of the developing world.

The final panel member in the first session was Janet Hatcher-Roberts who spoke about the important leadership shown by IDRC and CIDA in the 1980s in launching a health strategy with a vision to strengthen health systems and health systems research. She described this decision as an exciting moment of leadership for Canada. She then outlined how over the 1980s priorities shifted away from health to sustainable development and how Canada continued to show leadership in linking the environment and health. In the early 1990s, CIDA's action plan on AIDS and HIV renewed Canada's leadership on global health.

She went on to discuss how the current systems to deliver new health investments are weak but that global health is an increasing priority at the federal level with both Health Canada and the Public Health Agency of Canada undertaking important reviews on global health in the past year. In her view, some of the key lessons that emerged from these initiatives were:

- The reality that there will be shifting priorities between sectors, and that global health leaders need to be flexible and nimble to insert health in the broader social agenda to ensure that we can keep a commitment to health over the longer term;
- That NGOs and other key stakeholders need to be brought in at the beginning of the research process to determine the research questions; and
- The importance of leveraging partnerships balancing the political need for results over the short term with the need for sustained investments.

She concluded by suggesting that it is critical for Canada to teach global health in universities and that it is our students who are the future of global health. They have a strong and largely untapped desire to work overseas and that it is important to provide them with opportunities like internships in order to capture and utilize their energy and enthusiasm.

³ http://www.idrc.ca/en/ev-114548-201-1-DO_TOPIC.html

Discussion following the panel's presentation included an exploration of the importance of communicating the benefits of investments in global health directly to citizens and voters through initiatives such as Make Poverty History.

A second theme was the importance of agriculture and economic development to health and the fact that health, social and economic systems are inextricably intertwined.

A third theme that emerged was the importance of organizing and mapping Canada's global health investments and ensuring that there are clear career paths for global health researchers and academics.

Several participants suggested that Canada has a unique role to play in global health as a result of our multi-cultural and multi-ethnic heritage while another emphasized the importance of focusing on maternal mortality and the significant issues around gender, human rights and health.

Collectively the panelists suggested that the key element in making a difference in global health is leadership. The panel concluded with a discussion of the tension between the need for research on health and on the determinants of health and with a caution against taking a short term focus on Return-On-Investment (ROI) versus a longer term focus on impact.

C. Institute of Medicine Report “The US Commitment to Global Health”

Prabhat Jha (University of Toronto)

The second session of the day was a presentation by Dr. Prabhat Jha on the findings of the Institute of Medicine report entitled *The US Commitment to Global Health*⁴. The report itself was the product of a year-long review undertaken by a distinguished panel co-chaired by Harold Varmus and Tom Pickering. This process actually produced two reports, one that made recommendations for the new administration and one that contained recommendations for public and private partners. The report made broad recommendations in four areas:

- The first was to speak out – the report argued that the US should make global health a pillar of foreign policy including a declaration on the importance of global health.
- The second was to spend more but also to spend better, to double annual investment from \$7.5B to \$15B, including an explicit call for \$2B to be spent on non-communicable disease. The report recognized the need to balance the investment portfolio in global health since currently 73% of US global health spending is on HIV, a disease that is only responsible for 7% of total deaths. This finding also suggested the need to develop new outcomes indicators on which to undertake this rebalancing.
- The third was to emphasize the comparative advantage of the US in research and the need to focus global health spending on research. As a case in point, the new director of the NIH has said that global health will be a priority and that the Center for Disease Control will have a department of global health.

⁴ http://www.nap.edu/catalog.php?record_id=12506

- The fourth was the need for better partnerships between US and developing world institutions including the creation of a coordinator position at the White House to enable and support this activity. An important component of this recommendation was the need to support the WHO as a lead organization in establishing and sustaining global health partnerships.

The balance of the presentation focused on the implications of the report for Canada. A first observation in this regard was that although Canadian investments in global health have grown from \$180M to ~\$550m in terms of our Official Development Assistance, Canada's investment still constitutes only 2% of global health spending in this regard. Even in terms of our investment in global health as a percentage of our overall aid we are well below the US. China and India alone have over \$32B invested in health research. Given that we are only a small partner in terms of spending it is critical for Canada to think about development in a broader outcomes-oriented manner.

Dr. Jha put forward a vision that in March 2015 Canada will be a global leader in health. He pictured the cover of the Economist in 2015 with a moose wearing a stethoscope and lab coat trumpeting Canada's leadership in global health. He then asked the question – what would it take to get there?

First of all, he suggested, Canada would have to increase its global health spending from \$0.5B to \$1.5B. He also suggested that there would need to be a dramatic change in the nature of CIDA from the Canadian International Development Agency to the Canadian Innovations in Development Agency. Further, Canada would need to end all bilateral assistance and invest \$700M in multilateral health systems strengthening, with all multilateral aid heavily concentrated in sub-Saharan Africa. Finally, Canada would have to adopt a balanced portfolio focused on more than just the achievement of the MDGs.

As a second pillar, he suggested that Canada would need to invest \$500m to scale up promising delivery strategies and technologies (defined as more than just biomedical products, but also policies, such as smart tobacco taxation, and strategies such as conditional payment programs). As part of this investment Canadian academics would be seconded to work inside CIDA to implement innovations to ensure the effective delivery existing and new products and services.

Third, Canada would need to lead the creation of a G20 science corps, modeled on the US Peace Corps, that would be housed and sponsored in two core universities and that would work closely with IDRC on bilateral strategies to support scientific exchanges. As part of this new focus, Canada would link global and domestic spending in science. For instance, IDRC would make a \$100M investment to aggressively seek to match Canadian funded research with research in the developing world.

Fourth, Canada would need to undertake a Global Clinical Research effort on the complex management of chronic disease that would deal with a broad range of diseases. This would include a \$50m per year program to fund 15 mega trials, five of which would be led by Canadian investigators. Canada would also invest \$50M in Statistics Canada to develop expertise in global health statistics.

For this to happen, Dr. Jha argued, Canadian researchers and global health experts need to communicate the importance of global health research to MPs and to Canadians more broadly. In

particular, it would be important to explain the extraordinary return from health research. In addition, the Canadian government would need to show leadership by pushing for Canada to take leadership in international organizations. He indicated that it would be critical to integrate scientists into the foreign affairs portfolio and that 20% of ambassadorial positions should be filled with scientists.

Dr. Jha concluded by stating that research is the key driver of the discovery of new knowledge and new knowledge is the driver of the big gains that have been experienced in economics and health over the last 40 years. For example, over 66% of the declines in childhood deaths are due to knowledge and its diffusion, versus only 7% for income growth or 21% for education. Currently, however, Canada is vastly under-investing in global health research. To increase this level of investment, Canadian scientists and researchers will need to understand and effectively communicate the returns on investment in science.

The discussion that followed focused on the importance of working with local researchers and institutions to ensure that the new knowledge that is created is relevant on the ground and on the importance of social determinants of health in determining overall health outcomes.

D. What can the Government of Canada contribute to Canada's Strategic Role in Global Health?

Chair: *Elizabeth Dowdeswell*

Panel: *Howard Alper (IDRC), Margaret Biggs (CIDA), David Butler-Jones (PHAC), Abdallah Daar (GCC/MRC), Nancy Edwards (CIHR), Michael Hayden (Gairdner Foundation/UBC)*

The final session in the morning focused on the role for the Government of Canada in articulating and supporting Canada's strategic role in global health. The panel presentation began with comments from David Butler-Jones on the role of the Public Health Agency of Canada in global health. Some of the key areas of focus for PHAC include the social determinants of health and health diplomacy. Other areas of focus include the development of the capacity to produce sufficient supplies of critical vaccines both for Canada and for other areas of the world. The observation was made that Canada does not currently have a strategic policy on global health.

The panel continued with comments from Margaret Biggs on the role of the Canadian International Development Agency (CIDA). Up to a quarter of CIDA's investments are related to health. Although this investment could be more strategic, CIDA's strategy has been to make investments that are catalytic in five key areas:

1. Infant and Child Health
2. Maternal Health
3. Poverty Related Disease
 - a. AIDS
 - b. Vitamin A deficiency, Canada has taken the lead on this by supporting initiatives that have saved more than 2 million lives
4. Health Systems

5. Communicable diseases such as HIV, malaria, and tuberculosis
 - a. Immunizations
 - b. Bed nets

The position was also advanced that CIDA can work more effectively by:

1. Putting greater focus on food security and on other areas in which Canada has a comparative advantage;
2. Respecting and endorsing our partners ideas, priorities, and their systems;
3. Scaling up successful programs;
4. Focusing attention on gender equality as a major health determinant;
5. Focusing on innovation through the creation of an innovation fund and support for breakthrough scientific research.

Some the key barriers that impact on the effectiveness of this investment include:

1. Limits to coherence in the investments;
2. Fragmentation – a focus on investments on a disease by disease basis; and
3. Lack of Focus on Frameworks – Frameworks will enable the participation of a broader range of Canadian stakeholders.

Dr. Howard Alper outlined IDRC's vision of global health. He indicated that strategically, the International Development Research Centre (IDRC) attempts to view global health research from a systems perspective. Some areas of key focus areas include financing, resource generation and the social determinants of health. The Development Innovation Fund (DIF) and the Global Health Research Initiative (GHRI) also offer opportunities to address gaps in global health research. Again, fragmentation between the provinces and the federal government and between Canada and the international research community was identified as a key barrier to success. At the end of his comments he indicated that the IDRC partnership with Health Canada and CIHR can make a difference in terms of Canada's role in global health.

Nancy Edwards from CIHR explained that one of the key focal points for CIHR is on population health research. The Canadian health care system is an important model for the rest of the world as is the concept of universality and equity. There is a significant opportunity to help set the agenda on health promotion and population health. She emphasized that Canada's advantage on the international stage has not have been as a colonial power, and explained the need for a bottom-up approach. Later she emphasized that it is also critically important not to forget a major gap in health equity in terms of our own aboriginal population. In her view, some of the key areas of focus for future research include:

1. Reciprocal North-South learning
2. Mainstreaming global health research

Michael Hayden explained that the Gairdner Foundation currently funds a global health award for a leading health researcher. He also suggested that the potential exists for the Foundation to expand this

work and, potentially, to fund a second award in global health policy. One goal of the foundation over the longer term is to unleash the entrepreneurial spirit of Canadians to form partnerships with developing world partners. He also pointed to the potential role that could be played by Canada's Diaspora health professionals. As an example, he reminded the symposium that 7-8% of Canadian doctors are born in South Africa.

The panel presentation concluded with a discussion of the Global Alliance for Chronic Diseases⁵ by Dr. Abdallah Daar who introduced an approach that he called "leadership through partnership". He explained that in 2006, a process was launched to identify Grand Challenges in chronic diseases. These conditions, predicated on three key risk factors: smoking, poor nutrition and lack of exercise, are the largest killers on a global scale.

Following the publication of the Grand Challenges in Chronic Non-communicable Diseases in *Nature* in 2007, the decision was taken to create a body to launch grand challenges competitions in this area by developing joint RFPs and a review mechanism evaluate proposals. The GACD was launched in Seattle by a coalition that included CIHR, the NIH, the UK, India and Australian Medical Research Council and many others representing 80% of the world's global medical research funding. One of the key lessons from this process was the importance of creative priority setting as a tool to focus research funding and public attention. Dr. Daar also emphasized the importance of partnership. Further, he commented that Canada needs to develop a clear strategic direction and needs to work with the political leadership in other countries. Weak schools of public health as well as the health of Canada's aboriginal population were also mentioned as areas that require attention.

The discussion following the panel presentations focused on the linkages between human, animal and public health issues. There was also a discussion of the key questions to consider including:

- How to line up a global health agenda with domestic priorities?
- How to determine what investments are the most significant?
- Where can our investments have the most impact?
- What is the coherent direction or framework that can inform Canada's investments in global health?

Some of the comments in response to these questions emphasized that it is important to be clear and coherent and to identify a set measurable outcomes. Water, sanitation, the provision of electricity, and most importantly; education were cited as challenges that need to be addressed through coherent action. These outcomes must be based on a set of common priorities and clear direction. Another key challenge that was identified was the need to balance predictable results with the need for innovation. One strategy to do so might be to develop an R&D partnerships fund to enable the development of global health oriented public/private partnerships.

⁵ <http://www.gafcd.org/>

Another interesting element of the conversation was a focus on the ethical and moral dimensions of global health and the moral obligation for the developed world to 'give back' in return for the health human resources that it takes from the developing world.

The panel concluded with a discussion of the potential role of global health as a theme at the G8, along with the need to clearly articulate why it is important and to communicate its benefits. A final element of the conversation that is worth noting was the articulation of the view that global health includes Canada and the health of our own aboriginal populations and that it is not simply a North-South or us/them phenomenon.

Themes that emerged throughout the discussion were: the need for focus, innovation, partnership and the challenge posed by fragmentation in the system.

E. What Can Universities, Civil Society and Industry contribute to Canada's Strategic Role in Global Health?

Chair: *Bartha Knoppers (McGill University)*

Panelists: *Lorna Jean Edmonds (CCGHR/U of Toronto), James Orbinski (U of Toronto), Ronald Labonte(U Ottawa), Stuart MacLeod (UBC)*

The afternoon began with small group discussions on the question of Canada's strategic role in global health. The small groups were moderated by the four panelists and the chair who then reported on their respective discussions.

The first group laid out a set of core activities that could be undertaken including: continuing to strengthen and share Canada's research capacity and training, leveraging our political neutrality in dealings with other countries, sharing our health system and public policy research expertise, using the model of GHRI to expand Canada's global health research, funding the creation of common health research infrastructure and the dissemination of our knowledge of health determinants to researchers in the developing world.

The second group focused on Canada's potential role in capacity building by leveraging our strong institutions of higher education. They articulated that Canada spends hundreds of millions of dollars annually on training, an investment that could be leveraged to develop strong developing world science and research institutions. Part of the process of leveraging this capacity would be to inspire (and fund) students to work as interns in the developing world, focusing on increasing science and technological capacity.

Over the medium term, the observation was made that many companies in the developing world need human capital to be successful – there is a shortage of trained HQP. Over the past few decades, the emergence of a paradigm for training and education in fields like agriculture and the environment has led to an increase in human capital in the developing world that has helped to address this challenge in these fields. Given this success, it will be important to develop a truly collaborative paradigm for health

research to echo this success in the health sector. Canada could also play a critical role in developing this new paradigm by leveraging our existing capacity to embrace and include many different cultures in our own society.

The third group emphasized the capacity for Canada to play an inspirational/visionary role in global health. In the same way that Canada was instrumental in launching the concept of peacekeeping in the 1950s we now have an opportunity to play a catalytic role in global health. Principles that were identified to guide Canada's role in global health included equity and the need to collaborate and form partnerships in a way that respects our partners core beliefs and principles.

In thinking about how to engage in global health activities Canada could leverage our federal system of government, our ability to create and enable effective collaborations and partnerships, our capacity to balance multilateral and bilateral activities, our experience in engaging the public and private sectors and our strength in creating compelling narratives to engage the public and increase their awareness of global health issues.

In terms of specific Canadian strengths that could be leveraged for global health, this group identified: environment and health, health systems, social determinants of health, primary healthcare, information systems and metrics.

Finally, the third group discussed the potential role and impact of the CAHS. One role would be for the academy to lead the way on global health by developing its own global health strategy and then invite the government to join in and support the strategy. This strategy would leverage the Academy's multidisciplinary, integrated and science based approach.

The fourth group identified three particular areas of focus for Canada: developing effective and universal health systems, bringing coherence to health research, and focusing on the health of aboriginal populations. In terms of the first area of focus, effective health systems, it was felt that the Canadian system provides an important example of success and that Canadian research on health systems had led to real and significant impacts.

In terms of the coherence of health research, this group suggested that it would be important for health researchers to work with researchers and engineers in other disciplines and to focus on key crosscutting issues like the need for better forms of energy production. In addition, it would be important to work in an inter-sectoral manner cutting across government departments and agencies.

Finally, in terms of aboriginal health, this group felt that Canada has not managed to share our key learnings (both positive and negative) globally and that there may be an important role for Canada to play in terms of capacity development and in forming linkages with other countries with significant aboriginal populations.

The fifth group focused on the role of academic communities and the potential for these communities to influence decision makers. The four key activities that were identified in this regard were the need to:

1. Build on Canada's domestic strengths and priorities in health, health care systems, good communication systems, aboriginal health;
2. Make investments in the higher education sector and to develop a global health vision that goes beyond medical training. Australia, for example, has pursued a more international role for its institutions of higher learning;
3. Focus on health professional education; and
4. Build on other Canadian technical advantages such as engineering and biotechnology.

This group concluded by emphasizing that in global health, "we are they" – we are all part of global health.

The discussion that followed the presentations touched on a number of interesting topics. It began with a discussion of the need to go beyond simply sending youth abroad, but rather inspiring them with a mission and vision to undertake a new set of activities. Concern was also expressed with the concept of 'capacity building' which seemed to be somewhat paternalistic.

There was a longer discussion of the role of industry and the importance of developing better medicine for children. For example, the WHO has developed a list of essential medicines for children and the potential impact of partnerships to deliver and refine these medicines could be significant. These partnerships could include government, industry, academics, NGOs and others. A specific example that was given was of the potential impact from the creation of a child-friendly formulation of Amoxicillin, an important drug in treating pneumonia. A reformulation of the drug would have a massive impact on child health but up to 500m doses would be needed annually to meet the global demand.

Another example was the role of the Canadian biopharmaceutical industry in successfully developing the polio vaccine in the 1950s. This success was due to the combined result of political leadership, good science, good discovery and Canada's world-class biopharmaceutical development process. It was about forming the right partnerships at the right time to ensure the right needs were being addressed. Other diseases such as diphtheria and small pox have also been treated on global scale as a result of Canadian PPPs and political will.

The single largest challenge that was identified during the discussion was the need for increased focus – there is so much that Canada could do but what should it do?

Finally, there was a discussion of the important potential role of the CAHS in setting the stage for global health, in telling a compelling narrative. Canada is seen as an honest broker internationally and strong decisive action by Canada could have a significant global impact.

F. International Response Panel

Chair: *Peter Singer (MRC)*

Panelists: *Alan Bernstein (Global HIV Vaccine Enterprise), Carol Dahl (Bill and Melinda Gates Foundation), Hon. Peter Msolla (Science Minister, Tanzania), Nelson Sewankambo (Principal, Makerere University College of Health Sciences)*

The final panel of the day provided a response to the day's deliberations from an international perspective. The Honourable Peter Msolla began by giving a general overview of Tanzania, and its relationship with Canada. He indicated that the relationship with Canada had been established right after independence in 1961. He pointed to a high level of primary education in his country at 99%. He then discussed the health situation in Tanzania, emphasizing the extent of the challenges that are faced in a country that spends less than 0.1% of its GDP on research and development. The Minister focused on the need for significant investments in science capacity to overcome the health challenges of his nation, in particular, infectious diseases including TB, Malaria and HIV (with a current infection rate nationwide at 7%).

The Minister's remarks were followed by Nelson Sewankambo who embraced the fact that Canada is trying to do the right thing in global health. He emphasized, however, that global health includes Canada, particularly in relation to our own aboriginal populations, and that the context of working in global health includes work inside Canada. He also emphasized the importance of supporting research networks and collective learning. His main point was there were a lot of potential partners now for developing countries so Canadian researchers would need to make their value proposition clear.

"We in the developing world needed the world more than the world needed us. With the issues of global health, the world seems to need us more than we need them."

Carol Dahl focused her comments on the commitment of Canada to global health but the lack of certainty around what is meant by global health. She emphasized that there are areas of global health in which Canada could be a world leader but that without an understanding of our current roles and activities it will be difficult to identify and pursue areas of untapped possibility. She continued by emphasizing the holistic nature of global health giving the example of the close relationship between nutrition and health.

In her view, coordination and integration are important along with an acceptance of the fact that returns on investment might be a long way off. Given this gap between investment and return, however, longer term sustainability may be hard to achieve.

She stated that focus is essential and that focus can only begin by defining clear goals, for instance, the achievement of the MDGs. She concluded her remarks by outlining four broad areas of commitment:

1. Continuing Canada's strong work on delivery and linking this investment to innovation systems;
2. Continuing to work on innovation, including the involvement of the private sector;

3. New investments in discovery and research, and a focus on how to apply more of Canada's research to global health challenges; and
4. Facilitating and building research capacity in the developing world through partnerships with scientists and researchers in developing world institutions.

Alan Bernstein emphasized that the academic community more broadly has an important role to play in global health. This opportunity is predicated on the ability to match needs to strengths. He made the argument that to build capacity at the level of individual health workers it is necessary to start by helping to build national and international global health institutions. One strategy to achieve this is through strategic twinning with academic institutions in the developed world. He emphasized the importance of coherent programs for training young people and the need for a bold vision for global health. He also emphasized the fractured and fragmented nature of global health research and the need to get our own house in order in Canada. He indicated that Canada is well-known for our capacity to develop and build effective infrastructure. Finally, he stated that the real role of the Academy is to create new knowledge and apply it.

The discussion following the panel presentations focused on the challenges faced in Tanzania and the difficulty in implementing universal healthcare given the chronic shortage and emigration of medical personnel. It will be important to listen effectively not only to the scientific community but also to the voices on the ground and in the countries who may see different problem sets and have different perspectives on how to get things done and quicker. To make a meaningful contribution, Canada should assume that people in the world are knowledgeable and can make meaningful contributions to their own improved health. We also need to be focused, define what we want to achieve and work backwards to figure out how to get there. Finally, we will also need clarity of vision, the ability to foster collaborations, commitment over the long haul and the capacity to figure out new ways to stimulate innovation. The comment was also made that public/private partnerships are key.

G. Conclusion

Peter Singer (MRC)

The symposium concluded with remarks from Peter Singer who stated that the objectives of the symposium had clearly been achieved. There was a clear sense that a more explicit analysis of Canada's strategic role in global health would be helpful. Participants had explored Canada's role in global health, identified some of our key strengths and potential contributions and outlined some strategic priorities moving forward.

John Dirks, president of the Gairdner Foundation spoke about the *Canada Gairdner Global Health Award*, which is a \$100,000 prize for basic clinical or population health sciences that is of benefit to low-middle-income countries. Dr. Nubia Muñoz was awarded the prize for her epidemiological studies that defined the essential role of the human papilloma virus in the etiology of cervical cancer on a global level which led to the development of successful prophylactic vaccines. The Gairdner Foundation is also developing a second award (separate from the international award) for innovation, called the *Canada*

Gairdner Global Health Advancement Award. This award will recognize research-based policy making, successfully developing strategies for implementation and those who, from a research perspective, brought about significant change in developing countries.

Dr. Singer continued by highlighting the focus throughout the day on innovation and the role of innovation in global health. He suggested that there is a new emphasis on global health research in the federal government as demonstrated through the creation in Budget 2008 of the Development Innovation Fund:

*Budget 2008 provides an initial \$50 million over the next two years for a new Development Innovation Fund, sourced from planned growth in international assistance. The fund will support the best minds in the world as they search for breakthroughs in global health and other areas that have the potential to bring about enduring changes in the lives of millions of people in poor countries.*⁶

Finally, Dr. Singer highlighted the potential for Canadian scientists to take a leadership role in addressing the health challenges of our own aboriginal population and that this would be one of the strongest proof points for Canada's legitimacy in global health.

The discussions in this Symposium would serve as an excellent ground work for a possible future assessment of Canada's strategic role in global health by CAHS.

⁶ The Federal Budget 2008, Government of Canada

Annex I: Agenda (including speakers and panelists)



Canadian Academy of Health Sciences
Académie canadienne des sciences de la santé

Canadian Academy of Health Sciences Symposium 2009 “Canada’s Strategic Role in Global Health: What is it and what should it be?” <hr/> Monday, September 21, 2009 Fairmont Château Laurier, Ottawa, Canada	
8:00 am	Registration
8:30 am to 9:15 am	Welcome and overview Martin Schechter, President, CAHS Peter A. Singer, Foreign Secretary, CAHS
9:15 am to 9.45 am	Historical perspective on Canada’s role in global health Chair: Elizabeth Dowdeswell Panelists: Janet Hatcher-Roberts (CSIH); Victor Neufeld (CCGHR/McMaster U); Frank Plummer (U Manitoba)
9:45 am to 10:15 am	Institute of Medicine Report (2009)-“The US Commitment to Global Health” Prabhat Jha (SMH/U of T)
10:15 am to 10:45 am	Break
10:45 am to 12:15 pm	What can the Government of Canada contribute to Canada’s Strategic Role in Global Health? Chair: Elizabeth Dowdeswell Panelists: Howard Alper (IDRC); Margaret Biggs (CIDA); David Butler-Jones (PHAC); Abdallah Daar (GCC/MRC); Nancy Edwards (CIHR); Michael Hayden (Gairdner Foundation/UBC)
12:15 pm to 1:00 pm	Lunch
1:00 pm to 2:15 pm	What can Universities, Civil Society, and Industry contribute to Canada’s Strategic Role in Global Health? Chair: Bartha Knoppers (U de Montreal) Small groups: Discussion Leaders – see below
2:15 pm to 3:15 pm	Plenary panel of discussion leaders Panelists: Lorna Jean Edmonds (CCGHR/U of T); James Orbinski (U Toronto)-TBC; Ronald Labonte (U Ottawa); Stuart MacLeod (UBC)
3:15 pm to 3:30 pm	Break
3:30 pm to 4:30 pm	International Response Panel Chair: Peter A. Singer (MRC) Panelists: Alan Bernstein (Global HIV Vaccine Enterprise); Carol Dahl (Bill and Melinda Gates Foundation); Hon Peter Msolla (Science Minister, Tanzania); Nelson Sewankambo (Principal, Makerere University College of Health Sciences)
4:30 pm to 5:00 pm	Summary and next steps Peter A. Singer (MRC)

Annex II: Analysis of Canada's Investment in Global Health

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CAHS Symposium 2009

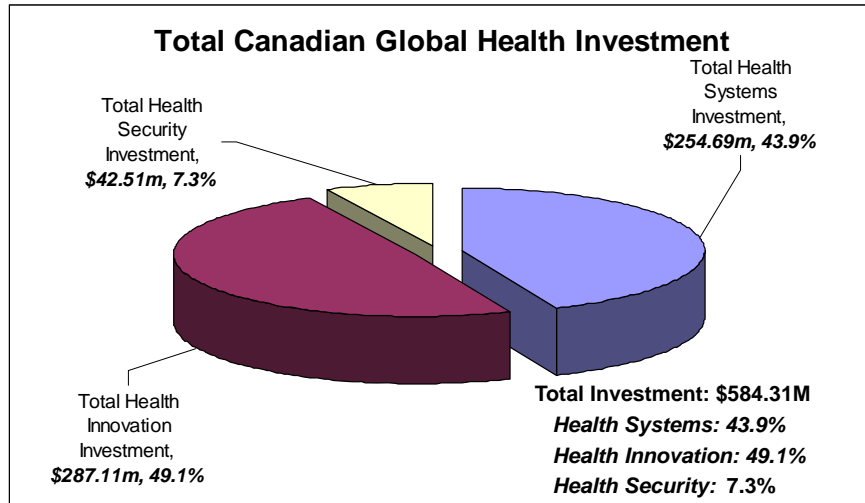
Analysis of Canada's Investment
in Global Health

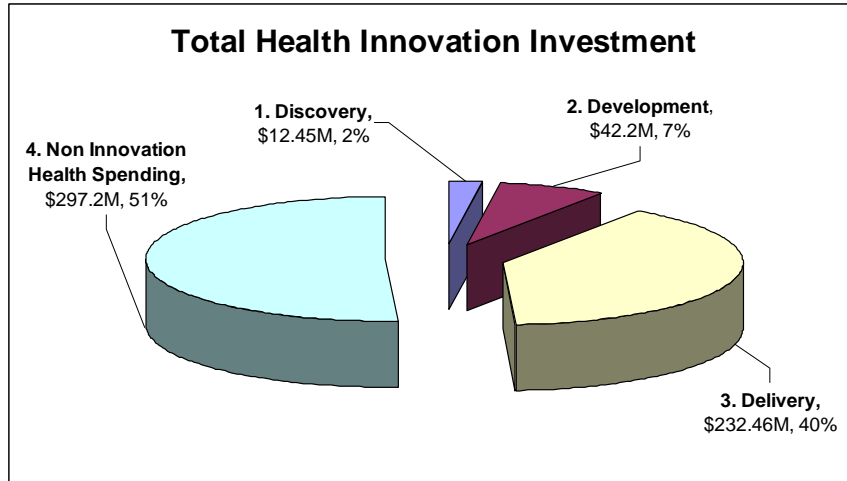
Peter Singer, Director
McLaughlin-Rotman Centre for Global Health

Prepared by DBk Consulting

Total Canadian Investment in Global Health 08/09

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Health Innovation – Key Programs and Investments

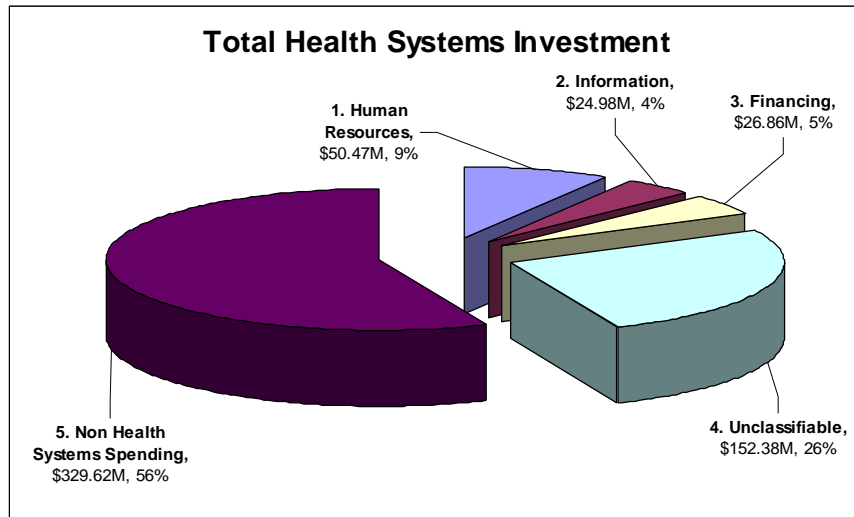
Health Innovation	Key Programs/Investments
1. Discovery	<ul style="list-style-type: none"> • Development Innovation Fund \$5m • Parts of AHI
2. Development	<ul style="list-style-type: none"> • International Aids Vaccine Initiative \$20m • Bill and Melinda Gates Foundation \$22.2m
3. Delivery	<ul style="list-style-type: none"> • Global Fund \$109m • Funds to Eradicate Polio \$90m • Global TB Drug Facility \$7.35m

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Health Systems Investment

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Health Systems – Key Programs and Investments

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Health Systems	Key Programs/Investments
1. Human Resources	<ul style="list-style-type: none"> • Africa Health Initiative (AHI) \$45M • Catalytic Initiative to Save A Million Lives \$21M
2. Information	<ul style="list-style-type: none"> • Components of the Catalytic Initiative \$5.25 • Components of UN Agency Support \$5M
3. Financing	<ul style="list-style-type: none"> • Regional Development Banks \$24.36m
4. Unclassifiable	<ul style="list-style-type: none"> • Components of AHI \$25.6m • Bi-lateral/ Multilateral CIDA (Malaria, HIV/AIDS, TB) \$116.34m

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Health Security – Funding Breakdown

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Health Security	Funding (\$M Can)
1. PHAC (GPHIN)	3.5
2. DFAIT (Health Security)	1
3. CIDA (Avian Flu)	27.5
4. WHO	10.51
Total	43.51

Note: the data quality in this area is low so it is likely that there are other pockets of Health Security funding that have not been identified such as support for the purchase of anti-viral stockpiles in developing nations