

REPORT OF THE FEBRUARY 2002 MEETING RAPPORT DE LA RÉUNION DE FÉVRIER 2002

SCIENCE ADVISORY BOARD LE CONSEIL CONSULTATIF DES SCIENCES

February 19-20, 2002 les 19 et 20 février 2002

Health Canada February 2002 Santé Canada février 2002

----- Note: Contents of the Meeting Report are a reflection of the discussions of the February 19-20, 2002 Science Advisory Board Meeting. The points contained in this document are those of the Science Advisory Board and do not necessarily reflect the views of Health Canada and its employees. Le contenu du présent rapport est le reflet des discussions de la réunion du Conseil consultatif des sciences tenue les 195 et 20 février 2002. Les points de vue qui y sont exprimés sont ceux du Conseil consultatif des sciences et ne reflètent pas nécessairement les points de vue de Santé Canada et de ses employés.



Day 1, Tuesday, February 19, 2002

Attendance: Judith Hall, Richard Lessard, Karen Grant, Rodney Ouellette, Stuart Macleod, Linda Lusby, Irv Rootman, Carol Herbert, Paul Paquin, Ardene Robinson Vollman

Ex Officio Members: Ian Green, Kevin Keough, Munir Sheikh

Others: Dr. Janet King, Sheryl Barrett

Secretariat: Valerie Marshall

1. Opening Remarks - (Chair - Judith Hall)

The Chair welcomed members to the meeting.

She pointed out Board member Dr. Allan Ronald was pursuing opportunities in Africa and would likely need to resign from the Board. She reminded members to forward their suggestions for new appointees reflecting the areas of ethics, communications and international areas.

The Chair said she welcomed comments from Board members on her letter to the Minister following the December meeting and would continue forwarding copies of letters written on the Board's behalf

2. <u>Health Canada Update and Welcoming Remarks</u> - (Mr. Ian Green, Deputy Minister)

The Deputy Minister pointed out when he last spoke the Board in December, 2001, he suggested a renewed interest in health care reform was likely for the new year. That prediction has been fulfilled with items such as the tabling of the federal budget, a Cabinet shuffle with a new Minister of Health being appointed, the meeting of Premiers to discuss health care, the tabling of an interim report by the Romanow Commission and other events.

On the question of research and how it fared in the federal budget, the Deputy Minister pointed out that \$95 million would be invested into research activities at the Canadian Institute for Health Information (CIHI) and Statistics Canada which will help strengthen capacity to regularly report on the health of Canadians and the functioning of the health care system.

A clearer picture of the state of health care will be available in September when all jurisdictions would report out on outcomes, health status and service delivery. The Deputy Minister said Health Canada was the fifth largest health care provider in Canada because of its responsibilities towards the Aboriginal and Inuit people. He suggested the provinces would be watching this and other areas very carefully.

Discussion included the following points:

- Funding as part of the security file will allow a certain amount of build-up with public health care officials across the country.
- Communication with those in first-response role are important.
- Climate change will affect Canadian's health in ways the public does not yet understand. Part of the problem seems to be that environmental issues are a responsibility of another federal department.

Major discussion summaries:

The Science Advisory Board is extremely concerned that the issues of human resources, capacity-building, knowledge transfer and public health structure are being pushed aside because of the health security agenda. The Board sees these issues as building blocks for the health care system. While the Board is pleased Health Canada is involved in the response to public security, the Board encourages Health Canada to continue to argue on behalf of public health issues.

Health Canada should encourage debate on climate change so that Canadians can understand the long-term effects on health.

3. <u>Update - Chief Scientist's Office</u> (Dr. Kevin Keough, Chief Scientist)

Dr. Keough spoke of the progress in the area of the Science Policy Coordination Unit, which he suggested would be in place within six weeks. He explained the unit would help the Office of the Chief Scientist coordinate interbranch and interdepartmental science initiatives.

Looking back at the awards for research handled by the OCS, Dr. Keough said it was done as a one-time exercise. There were over 30 responses that were received and through a modified peer review process, proposals that were ranked as high or medium initiatives were funded. Dr. Keough did note the process was not representative of behavioural and social science.

The OCS is almost ready to launch a post-doc program. The intention is to fund 10 per year, with a two-year award, open to any discipline with both the research and researcher getting peer reviewed.

Dr. Keough noted that within the department, roughly 2,000 people do science-related work, with 105 being classified as research scientists. On the departmental data base, the Chief Scientist reported that 207 researchers have completed entries. The Office of the Chief Scientist continues to encourage all scientists within the Department to enter information into the data base.

Health Canada's Research Ethics Board is close to being constructed, with the make-up of the chair, four researchers, including two from Health Canada and two from outside, as well as two community representatives. In terms of the community representation, the OCS has canvassed 100 voluntary agencies. The REB will be balanced in terms of expertise, background, gender and linguistic areas.

Each year, Health Canada hands out excellence in science awards, mostly targeted at surveillance or bench scientists. This year's awards will have a new category for social science research.

In terms of Health Canada's relationship with CIHR, the Chief Scientist reported a number of co-sponsored meetings including the recent workshop on bioterrorism. The OCS will report back to the Board at its next meeting in terms of the ongoing work being done between HC and CIHR.

Dr. Keough reported back to the Board that a workshop on the development of the national food survey endorsed by the Board at its last meeting, would be held, as well as identifying areas where Canada might be able to contribute to a large U.S. study on Children's Environmental Health.

Discussion included the following points:

• There are constant difficulties in ensuring that the definition of science includes social science. This requires a change of mind-set in people and encouraging social scientists to take advantage of opportunities they might not otherwise consider.

• The Board would like to hear more about the links between Health Canada and CIHR. The Board remains concerned about role and view of social scientists within the Department.

Action item: The Board would like to see any material emanating from the joint workshop on bioterrorism.

4. Approval of December Meeting Record (Dr. Judith Hall, Chair)

The Chair noted that for this meeting, binders sent out ahead of time contained a fair amount of information compared to other meetings, but stressed the need for an earlier completion of the meeting record.

There was some discussion concerning the amount of information to be included in the meeting record, but no decisions on major changes were taken.

The meeting record was approved with changes made.

5. Realignment and the Health Agenda (Ian Green, Deputy Minister) (Please refer to presentation slides)

The Deputy Minister told the Board it was not a simple nor straightforward exercise to determine how Realignment had affected the health agenda because it was difficult to differentiate progress made through Realignment and progress made through a natural progression of business and changes made by newer people joining the Department, including the Chief Scientist and Assistant Deputy Ministers.

Mr. Green suggested that despite the difficulties in assessing changes wrought by Realignment, he believed science and research have gained larger profiles than previously achieved at Health Canada. The creation of the three science branches and the Pest Management Regulatory Agency, the Winnipeg and Guelph Laboratories, has created a critical mass of science.

The Deputy stressed the Realignment structure is now in place, but transformation continues the process of building a new culture at Health Canada and creating an up-to-date staff coupled with science excellence. Health Canada needs to continue moving in this direction, including a continued emphasis on building science capacity, building stronger links between scientists/researchers and the "users" of science.

Discussion included the following points:

- Communication is a vital process of transformation, with emphasis also placed on learning and teamwork.
- The Realignment process did not include a system of measurement for assessing hard outputs.
- Realignment was started by former DM David Dodge with the intention to create an ability for science leadership, create a better capacity for partnership and create a structure that valued science.
- The answers might be different if HC asked itself: Are we doing the job better and are we doing the right job?

Major discussion point:

- There have been changes and improvements at Health Canada because of a series of events, including new organizational structures and the impact of new people on how science is valued. The Board would like a further follow-up on this subject in the future.
- 6. Governance of Research Involving Human Subjects (Mr. Ian Shugart, ADM Health Policy and Communications)
 (Please refer to presentation slides)

Mr. Shugart outlined the objectives for the governance of research involving human subjects:

- to protect the rights and well-being of research subjects
- to promote scientifically sound research
- to maintain and enhance the public trust in research involving human subjects.

The ADM told the Board that since there have been elements of mishap or growing evidence of misconduct of different kinds and severity, no one should pretend that this is a theoretical problem.

- There are other approaches to deal with some potential problems, including criminal law. Research should not be exempt from criminal law.
- Governance is a problem for all agencies that fund or do direct research.
- One potential problem will be community projects.
- Health Canada will use its own Research Ethics Board to look at research.

The SAB suggested the main problem will be to create a system of governance that acknowledges and respects the differences in disciplinary approaches. This system must be addressed and developed alongside the ongoing evolution of the Tri-Council Policy statement.

7. <u>Science and Policy Development</u> - (Munir Sheikh, Associate Deputy Minister of Health) (Please refer to presentation slides)

Mr. Sheikh presented a framework on economic policy development and situated science in this framework to determine the types of issues that *may* arise in determining science funding in the budgetary process.

The framework was further used to explain how policy issues such as poverty reduction, tobacco taxes and the environment could be analyzed.

There were three key messages in this presentation. First, all governments face resource constraints and, therefore, end up making choices. Second, a most useful contribution economists and scientists, working alone or preferably together, can make in the development of policy is to present options that avoid trade-offs between economic and non-economic outcomes (e.g. improved health care). Third, in situations where trade-offs cannot be avoided, scientists and economists can help cabinet decision-making by providing much-needed analytical and empirical information.

Discussion included the following points:

Research may not provide known economic gain at the outset. Some research may
not provide dividends for years. There is not always a clear line from research to t
benefits.

Major discussion summary:

Scientists and economists would not necessarily agree on whether or not economic gain should be the driving force for research being funded. Given the political and economic realities of government, the challenge for scientists is to better articulate the argument that science improves quality of life and that contributes to the economic life of the country.

8. <u>Standards for Transplants</u> (Ms. Julia Hill, Associate Director General of Biologics and Genetic Therapies)

(Please refer to presentation slides)

Julia Hill spoke of the challenges facing Canada when dealing with organs and tissues, including the fact that anything in this area also has provincial implications.

The Board was informed about the draft standards developed by expert panels on areas such as ocular, reproductive and banked tissues, perfused organs and haematopoetic cells.

Health Canada and the Canadian Standards Association reached an agreement in 2000 to draft national standards. Health Canada will consider the most effective and efficient way of integrating sections of the standards into the regulations as part of the development of a new regulatory framework.

Ms. Hill suggested there is public interest in the area of xenotransplantation given the paucity of human organs. Xenotransplantation is the transplantation or transfer of living cells, tissues or organs from one species to another. There have been no applications for clinical trials to date.

The Canadian Council for Donation and Transplantation (CCDT) is mandated to provide advice on a broad range of issues related to organ and tissue donation and transplantation. The Council is the first one to report to the whole Federal-Provincial-Territorial cohort. To this point, terms of reference and three sub-committees have been formed. Health Canada has made \$4 million in funding available to create public awareness, for the Council and for administrative support.

Transplant waiting lists are increasing. Since 1991, the list has grown from just over 1,800 to approximately 3,800 in the year 2000.

- Social change in this area will take time. Educational campaigns are important.
- Organs and tissues are retrieved under a provincial procurement system. Organs are shared inter-provincially in the case of critically ill patients. Also provinces which do not have all transplant services will offer organs to other provinces/regions.
- Safety is a concern so that shared organs and tissues are free from disease.

Public education remains critical given the shortage of organs and tissues available for transplant. It is important that medical schools deal with the issue of training people to discuss this option with relatives. There is a concern about the safety of organs and tissues in terms of remaining disease-free. The Board is reassured that Health Canada is taking a leadership role.

Adjourned at 5:00 p.m.

Day 2 - Wednesday, February 20, 2002

In Attendance: Judith Hall, Richard Lessard, Karen Grant, Carol Herbert, Linda Lusby, Stuart MacLeod, Rodney Ouellette, Paul Paquin, Irv Rootman, Ardene Robinson Vollman.

Ex Officio Members: Ian Green, Kevin Keough

Secretariat: Valerie Marshall

9. Remarks- (Anne McLellan, Minister of Health)

Chair Judith Hall welcomed Minister McLellan to the Board meeting and spoke in general terms of work the Board could do for the Minister, including any advice in terms of health science related to Africa through the upcoming G-8 meetings.

The Minister told the Board that Africa would be centrepiece for the government through the G-8 meetings and agreed that health issues are increasingly important to that continent.

Ms. McLellan told members the Board plays a very important role to the Minister and she outlined the challenges she faces for the next 18 months.

The transcendent role for the country is health care renewal. The Minister said that she believed it was a good thing that Mr. Romanow had called on Canadians to participate in discussions about the future of the health care system. A base of good science and innovation will be key in this renewal. The Minister told the Board she looked forward to their advice and work in the context of renewal.

First Nations and Inuit health care is also crucial, given the lack of movement in this area despite the amount of money being spent in this area, said the Minister. The federal government faces huge challenges in this area and this will be a key priority for the Minister.

Bioterrorism also continues to be a major challenge for the Department, Ms. McLellan said, to ensure that everyone works together to understand the particular challenges this area brings with it, including discussions involving smallpox vaccine.

Discussion included the following points:

- Chronic disease remains a persistent problem and has greater impacts on the lives of Canadians than anything else.
- Looking at prevention, in terms of exercise, nutrition and tobacco use, is key to a health care strategy. The strategy could focus on the common elements of disease rather than on a disease-by-disease focus.
- Environmental health, including the impact of climate change on health, is also an important issue that must be faced.

Major discussion point:

- The Minister expressed her pleasure at meeting the members of the Health Canada's Science Advisory Board. She expressed her view that the work done by the Board was important and said she looked forward to the Board's comments.
- 10. <u>Update on Roadmap</u>- (Cliff Halliwell, A/ADM, IACC; Michael Wolfson, Assistant Chief Statistician, Statistics Canada, John Millar, Vice-president, Research and Population Health, CIHI)

(Please refer to presentation slides)

Due to travel commitments, John Millar spoke first to brief the Board on CIHI databases. He stressed accessibility to data is very important for CIHI and spoke about increased access through a new website and bilateral agreements with provinces and agencies. Confidentiality remains an important concern.

CIHI will reposition itself in a leadership role in terms of population health research, information systems, knowledge synthesis and knowledge exchange through the Canadian Population Health Initiative (CPHI).

Discussion included the following points:

- Privacy remains an issue, especially in the use of database statistics.
- Making knowledge available when researchers need it is also important. The key is to create a well of knowledge.

Cliff Halliwell noted the demand for data is growing for evidence-based decision making. The key is to have the health information contexualize administrative data.

Generating health data is expensive and investment is lagging behind. The problem is not just investment, but that the funding is not continuous and is generated from year to year.

Michael Wolfson outlined Statistics Canada's efforts in this area, in consultation with Health Canada and CIHI. The result is a set of priorities with specific projects through the Major Health Data Series.

He spoke of the power of the Statistics Act and the fact that despite that power, privacy and ethics remain difficulties. Mr. Wolfson's concern in these areas is that bone fide research will be thwarted by privacy advocates.

The Canadian Community Health Survey is an innovation coming through the Health Data Series. It will contain a sample size of 130,000 with smaller sizes in intervening years. Included in this survey will be a nutrition survey in two years.

Challenges ahead include the lack of secure funding, some major gaps in population health measures, major gaps in information on First Nations and Inuit populations and underutilization of the data.

- A model allows you to ask "what if" scenarios, for instance in the global burden of disease area.
- There remain problems in using some data because of initial agreements where only the holder of the data is able to do the analysis.
- Committing to doing things on a long term basis is important.

The Board remains concerned with privacy issues. While the Board acknowledges privacy is an important issue, it may block the legitimate need for health data. The Board is also concerned about the lack of long-term funding, recognizing that some research requires long-term work without immediate payback. The Board is gratified to hear of a planned nutritional survey in 2004, given its strong recommendation in December 2000 that such a survey be done.

• <u>CIHR Institute of Population and Public Health</u> (Dr. John Frank, Scientific Director)

(Please refer to presentation slides)

Dr. Frank spoke about five priority areas for CIHR-IPPH over the next five years.

- Capacity-building for PPH research and research transfer to policy, programs and public health practice, especially in less-developed regions of the country.
- Understanding and improving the effects of physical and social contexts on health, over the life course.
- Analyzing and reducing health disparities (socioeconomic, ethnocultural, gender-related, regional, etc.)
- Global health reseach, into major health and health care programs internationally, and the forces that underly them.
- Characterizing the role of genes and environments in co-determining health status, for use in prevention.

Dr. Frank added that Canada's role in global health research is crucial and he said by working together with other CIHR Institutes and partners such as IDRC, Health Canada and CIDA, the Institute could improve Canada's ability to investigate and intervene on forces that are global in nature.

In the past, Dr. Frank said, there had been underattention to joint genetic and environmental effects on health. Canada has a role to play in this area and could carve out a research niche for itself in this area.

The Institute has identified some potential "hot" research areas including stress and heart disease, early life risk factors for later chronic disease and gene-environment interactions in terms of a disease like asthma. All these areas promote good science, said Dr. Frank, while building capacity.

Discussion included the following points:

• There are few or no structures in Canada for making large, long-term grants.

Major discussion summary:

The Board is pleased to hear of the linkages between CIHR and Health Canada. In terms of health outcomes, it is important to show a full range of health determinants, including social outcomes and implications. One of the largest research challenges remains the links between genome and environment.

11. <u>Health Canada's Approach to Chronic Disease</u> - (Scott Broughton, ADM, Population and Public Health Branch)

(Please refer to presentation slides)

Over 77 per cent of Canadians will be affected by chronic disease over the course of their lives.

Health Canada has a leadership role to play in this area, especially with the provinces and non-governmental organizations.

Current disease-based strategies underway include the Canadian Strategy on Cancer Control; the National Diabetes Strategy; the Cancer Research Alliance; the Canadian Coalition on Cancer Surveillance and the Heart Health Initiative.

Current challenges for the Population and Public Health Branch include a decision as to whether to use an integrative strategy instead of a disease-specific one, acknowledging

current knowledge gaps and clarifying the roles and relationships among partners in moving toward integration.

- This presentation showed the "whys and hows" of research and surveillance and linking that to policy.
- The challenge within Health Canada is to balance health care and health.

The Science Advisory Board encourages this branch to make sure their materials, which are excellent reference and information tools, reach Canadians. Health Canada needs to make this material more accessible, while also making it understandable to the average Canadian. This material is important because it contains Canadian data. Emphasizing prevention is also important, as is promoting the difference between chronic and communicable diseases. The Board encourages Health Canada to think carefully about changing its approach from disease-specific strategies to integrative and balancing the two. This is an area where Health Canada should take the lead.

Meeting adjourned at 3 p.m.