

November 24, 2014

Advisory Panel on Healthcare Innovation
Health Canada
Ottawa, Ontario
K1A 0K9

We would like thank you for the opportunity to provide our comments to the Advisory Panel on Healthcare Innovation. Based on our experience with financial security systems and risk management, the actuarial profession is highly qualified to assist both in your efforts to manage the cost and risk of health care, and to evaluate proposals for innovation in this area.

The Canadian Institute of Actuaries (CIA) is the national organization of the actuarial profession. It establishes rules and monitoring and discipline processes for qualified actuaries, who must adhere to the profession's Standards of Practice. The CIA's Guiding Principles include Principle 1, which holds the profession's duty to the public above its needs and those of its members.

Actuarial skills are typically used to identify, quantify, project, and evaluate mitigation options for risk; primarily risk in the financial sector, where uncertain future contingent events with potentially large financial impacts are present. Consequently, actuaries are predominantly employed by life insurers, property and casualty insurers, pension plans, and investment companies. They determine liabilities contingent upon variables and evolving factors, which include mortality, morbidity, investment returns, and the impact of weather on damage claims. They provide viable financial solutions and frameworks to manage the risks inherent within financial security systems.

An expanded role for actuarial skills in Canadian public health will bring significant benefits to this field, especially in cost forecasting and risk management. As an example, actuaries working in the group life and health practice area have significant experience estimating factors such as health care inflation, utilization, and drug costs trends, to name a few.

Proposals for innovation in the healthcare system will need to be assessed for financial viability, and their long-term impact must be estimated. Actuarial skills can be readily applied to this exercise.

Costing and funding models are essential parts of the actuarial toolkit. These techniques would provide a much more robust framework by which future health care costs can be measured and the impact of different strategies assessed. Recently, the actuarial profession has made significant advancements in predictive modelling in many areas, the most dominant being

automobile insurance. These tools are extremely powerful in projecting expected financial outcomes. By applying our knowledge, we could develop a clearer picture of the drivers of health care costs and their evolution and impact on future costs. Our modelling expertise would allow us to project under a number of scenarios and evaluate the impact of public policies and strategies. One area of particular interest is finely stratified demographics. Health care costs are dependent on many factors—age, gender, location, living habits, etc.—and any work we do in this area will necessarily include these variables and their correlations.

Actuaries also have experience dealing with significant amounts of data. There are many different sources of data in the health care field, and a fairly robust model could be developed through their assimilation. In terms of specific recommendations, we would welcome an opportunity to work with the federal government to promote the free exchange of data between the healthcare system components. With this data, actuaries can develop these models and apply them across a wide spectrum of jurisdictions. We are experts in dealing with sensitive and confidential data and have processes to ensure confidentiality is maintained.

Another area of interest would be examining the viability of adding a pre-funding component to some segment of the healthcare system, as opposed to the “pay as you go” model that currently exists. We would be interested in doing modelling work to assess the viability of this idea and evaluate if the concept should be pursued or dismissed.

In the last two years, the Institute has sponsored three relevant research reports. The first focused on healthcare trends and costs for New Brunswick and projected them to 2020. The second was a joint effort with the Society of Actuaries (SOA) in the U.S. to identify areas where actuarial analysis can provide additional insights to the healthcare sector. Given actuaries’ strong analytical and modeling skills, they could bring new knowledge and expertise to the examination of costs and trends and evaluate funding models for public care plans. The third paper was also co-sponsored with the SOA and is aptly titled Sustainability of the Canadian Health Care System and Impact of the 2014 Revision to the Canada Health Transfer. All three documents are attached to this submission.

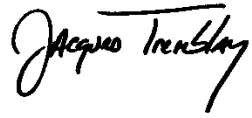
We acknowledge that there is good work being done in other disciplines to address the aforementioned issues. Actuaries’ analysis of the Canadian Institute for Health Information’s recent report, *Measuring the Level and Determinants of Health System Efficiency in Canada*, and other studies would add significant value and provide opportunities for us to collaborate with other experts in this field.

We would also like to call your attention to the Office of the Chief Actuary (OCA), which provides actuarial services to the Government of Canada on pension and social security matters. The OCA is another example of actuarial skills being valuable in public policy debates, as it has done an excellent job educating the public on the sustainability of our social programs. We can envision a similar role providing services and information to the healthcare sector.

Actuaries have significant expertise in and knowledge of the field of health care, and we encourage the members of the advisory panel to contact us at the address below to further explore how our profession can help you. We can provide an objective viewpoint and the modelling and forecasting skills needed to manage health care in Canada.

The Canadian Institute of Actuaries trusts that the suggestions provided above will be of value, and we thank you again.

Respectfully submitted,

A handwritten signature in black ink that reads "Jacques Tremblay". The signature is written in a cursive style with a horizontal line above the first few letters.

Jacques Tremblay
CIA President