

**PUBLIC POSITION:  
ACTUARIAL SCIENCE AND MEDICARE**

<b>Last Updated</b>	<b>January 22, 2014</b>
<b>Issue</b>	<p>Concerns about the long-term cost of Canada's healthcare system are at the forefront as governments consider both funding levels and potential reforms to determine their sustainability. To date, the application of actuarial science has been absent from these deliberations.</p> <p>The CIA has long advocated the involvement of the actuarial profession in forecasting and managing costs of healthcare more broadly. The CIA has sponsored a study for the New Brunswick Health Council of cost drivers in healthcare in that province. As part of the study, a model has been produced which generates forecasts of costs for budgeting purposes. As well, the CIA co-sponsored research projects with the Society of Actuaries on the sustainability of the Canadian healthcare system and the funding of public health insurance plans in Canada and other Organisation for Economic Co-operation and Development countries.</p>
<b>Position</b>	<p>The CIA believes that applying proven actuarial science to healthcare cost forecasting and planning by governments at federal and provincial levels will help secure a sustainable, affordable, and effective publicly-funded healthcare system for Canadians.</p>

**Position Support**

- The application of actuarial science uniquely combines probabilities, statistics, finance and risk theory to forecast the costs of benefits associated with future, uncertain events. We believe actuaries can help provide governments with the tools they need to arrive at a scientific framework for reform.
- Coming from an unbiased perspective, actuaries can maximize the use of health care data to evaluate Medicare's current cost trends, funding levels and clinical capacities. Their expertise will also be useful in areas such as developing the relevant data needed to answer the questions currently being asked and costing out potential methods for reducing waiting times for certain procedures or for extended coverage in areas such as pharmacare and home care/long term care.
- Actuarial involvement will improve governments' understanding of the true cost of meeting Medicare's commitments today and allow them to properly anticipate tomorrow's costs. Such involvement will help build public confidence in Medicare's longer-term fiscal sustainability.
- Governments in Canada, at both the federal and provincial levels, have seen fit to require the involvement of actuaries in providing essential, unbiased advice on design, costing, and funding of both private and public insurance and pension plans. The U.S. government has established an Office of the Chief Actuary who is involved in the Medicare/Medicaid programs there.

**Position Support:  
(cont'd)**

- A typical Medicare application would involve the development of four main models:
  - Population model to predict future population by age, health status;
  - Health care resource model for both government infrastructure and private providers;
  - Health care utilization and/or needs model; and
  - Health care cost model – both public and private.
- Such models play a critical role in monitoring, forecasting, comparing, evaluating and supporting ongoing management of the system:
  - Near-term costs/savings;
  - Costs in future years;
  - Costs versus levels of funding;
  - Financial implications of anticipated changes; and
  - Additional costs necessary to meet demands.
- Options for actuarial involvement with Medicare include:
  - Establishing an Office of the Medicare Actuary;
  - Engaging a team of actuaries to identify informational gaps and/or to review current models used to predict costs; and
  - Engaging a team of actuaries to provide advice, evaluate options and develop solutions on specific initiatives.

<b>Products:</b>	<ul style="list-style-type: none"><li>• “The Role of Actuarial Science in the Management of Medicare” – 4-page overview of CIA proposal (English and French);</li><li>• “Pharmacare, the Actuarial Contribution” – 4-page overview;</li><li>• Op-eds (English and French)</li></ul>
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## Public Position Approvals Form

Title: **ACTUARIAL SCIENCE AND MEDICARE**

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