



SOCIETY OF ACTUARIES

Article from:

The Actuary

September 1994 – Volume 28, No. 7

Actuary

Learning from early Canadian experience in health reform

by J. Bruce MacDonald

United States health insurance actuaries concerned about their plight after health care reform may find the history of actuaries involved in Canadian medicare helpful.

Let's begin with a few caveats. "Medicare" will be used in this article with its Canadian meaning, a government-run system of universal medical

coverage, rather than the narrower use in the United States, referring to its current limited Medicare program. Also, substantial differences exist between Canada in the 1960s, when Canadian medicare was introduced, and the United States in the 1990s. Most of the differences, however, are not Canada vs. United States as much as 1964 vs. 1994. Please keep in mind the differences in environment and in medicare plans when applying the Canadian experience to U.S. activities.

Canadian health reform in the 1960s

Health insurance was not as well developed in the 1960s in Canada as it is now in the United States. Fewer actuaries in all specialties existed then. Few health actuaries worked for consulting firms, and most Canadian companies in the health field also operated in the United States. No actuary was worried about his or her job becoming redundant.

As an example, I was in the group department of a middle-sized Canadian company in the 1960s, which also operated in the United States. Only two Fellows (one was the vice president whose

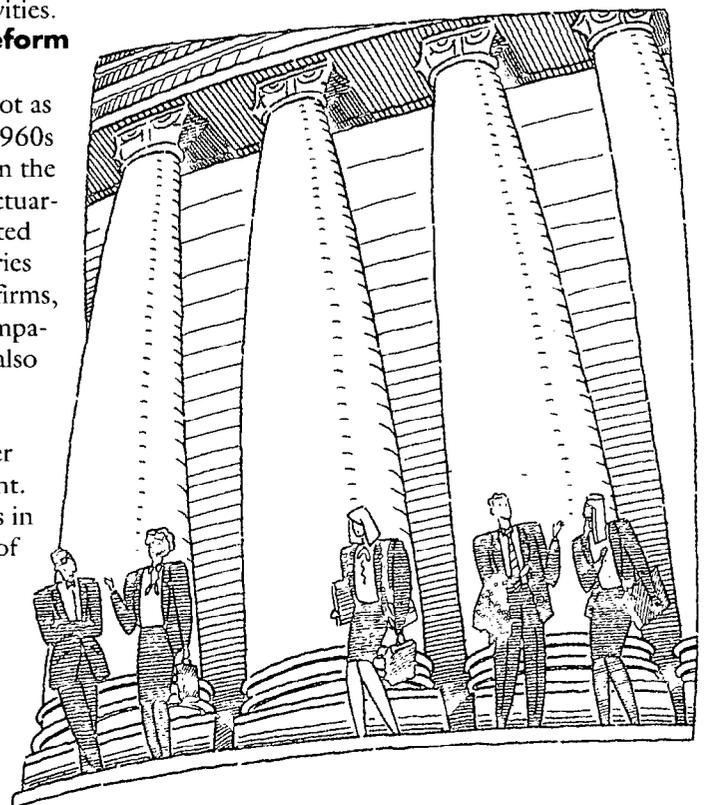
prime interest was expanding the group operation) and several near-Associates were on staff, who were responsible for group life and pension and group health. When part of the health insurance field in Canada was eliminated, it just meant we had more time for our other responsibilities.

Some of our initial assignments resulting from medicare's introduction

(continued on page 4)

Featured this issue:

Early Canadian health reform experience	1
<i>by J. Bruce MacDonald</i>	
Editorial: What the ASB means to the profession	2
<i>by Mary Hardiman Adams</i>	
Perils of the actuarial tourist	6
<i>by Charles Barry Watson</i>	
Mind your ethics	8
<i>by Michael Rion</i>	
Help for unemployed actuaries	9
<i>by Judy Wohlt</i>	
Actuaries are good sports, too, II	10
<i>by Mike Cowell</i>	
Section Corner	13
Book review: Easy-to-use source on health insurance issues	14
<i>by Thomas Livorsi</i>	
Q & E Corner	16
Letters to editor	18
Lighter Side	20



Early Canadian experience (continued from page 1)

were making cost estimates for the program and estimating the effect on physicians' incomes, both for the provinces and the medical profession. The Canadian Institute of Actuaries (CIA) was not involved in this work because it did not exist until 1965, when the implementation of Canadian medicare was well underway. Quebec is a partial exception to this, because it made greater use of actuaries. Claude Castonguay, a Fellow of the Society of Actuaries, played a prominent part in developing the Quebec system.

Overestimates by non-actuaries a costly mistake

Non-actuaries did some initial work that actuaries should have performed. A non-actuary made a projection of the Canadian population for the end of the century, estimating about 37 million citizens, a figure about 10 million too high. The population projections were made during the baby boom, and it was assumed that the "boom" would continue. They were not revised when the birth rate dropped drastically. Hospitals were built based on this estimate and, as a result, there are now more hospital beds than needed. This occurred even without allowing for improved medical techniques that have shortened hospital stays.

This contrasts sharply with the Canada Pension Plan (CPP), whose actuaries quickly revised demographic projections when the experience changed. In fact, the CPP actuaries never counted on the baby boom continuing and used a net fertility rate as low as 2 live births per female through reproductive age as early as 1964. More involvement by actuaries in Canadian medicare probably would have resulted in better demographic forecasts.

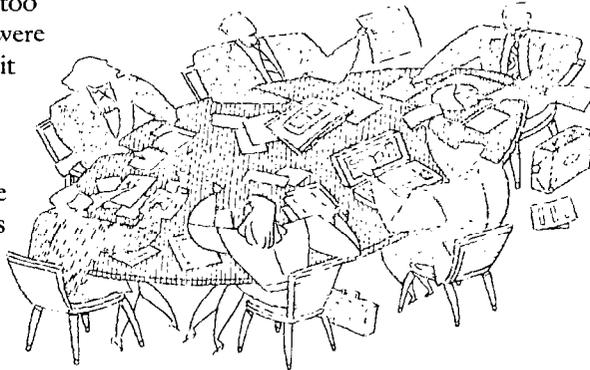
Canadian medicare structure outlined

Under the constitution, Canadian health care is a provincial responsibility, funded in part by the federal government. The federal government sets guidelines under the Canada Health Act, under which transfer payments are

made. This act requires that:

- Administration be on a non-profit basis by a public authority
- All necessary hospital and medical services be covered
- Services incurred outside of Canada be paid at the rate that would have been paid in Canada
- Coverage be universal
- Coverage be portable within Canada
- Coverage be accessible to all
- User fees, co-insurance, and deductibles are not allowed, and individual premiums, a type of deductible, are allowed.

Some provinces elected to cover services that were not required, such as eye refractions solely for prescribing glasses, services of chiropractors and similar health care professionals who were not medical doctors, and the full



cost of coverage outside Canada. Some provinces established drug insurance ("Pharmacare") plans, although in most cases they were limited to residents age 65 or up, or who had low incomes. A few provinces established dental insurance plans for children. Not all these coverages were required under the Canada Health Act, so provinces could impose conditions that the Act did not allow and could make changes unilaterally without federal consent.

Many services not under medicare are included under private health insurance, usually called Extended Health Benefits. A partial list of these covered benefits may include:

- Glasses and eye refractions solely for prescribing glasses
- Dental procedures in the dentist's office

- Semi-private or private hospital care
- Extra cost for services incurred outside Canada
- Ambulance service
- Drugs (except those prescribed while hospitalized)
- Services of physiotherapists, chiropractors, osteopaths, chiropractors, naturopaths, masseurs, podiatrists, and speech therapists
- Nursing care at home and most private duty nurses in hospitals
- Stays in convalescent hospitals and nursing care
- Laboratory charges incurred outside hospitals

While the market no longer existed for basic hospital, surgical, or medical insurance, a market still existed where health insurance actuaries could design and market health insurance.

As health costs escalated, the provinces began cutting back on services not required under the Canada Health Act that they had originally elected to cover. Cutting back these services might transfer the claims to Extended Health policies, depending on the contract wording. So the health insurance actuary had to make sure that private health insurance was not required to cover additional services without an increase in premiums and take the necessary steps to counteract this.

Missed opportunities

Many other opportunities have evolved for health insurance actuaries in Canada, in the areas of cost containment, claims analysis, and designing managed care.

I fear many of these opportunities have been missed, but for good reasons.

Not many health insurance actuaries working for insurance companies have actively analyzed claims, but the greatest amount of claims under Extended Health policies have been for prescription drugs. Though this severely limits the claims health insurance actuaries can analyze, room for improvement and the actuarial touch remains.

Underwriters have been inconsistent in their claims analysis, with some using sophisticated techniques and others using primitive methods.

Medicare authorities have a much greater opportunity to analyze claims, but unfortunately, few, if any actuaries, are working for medicare agencies, except in Quebec. As a profession, we have not pointed out the contribution we can make to medicare agencies.

Economics professor urges Canadian actuaries to get more involved

Jane Fulton, a professor of economics at the University of Ottawa, has completed some interesting studies on Canadian health claims. She has appeared on the Phil Donahue show and has been an advisor to Hillary Rodham Clinton. She spoke about her work, much of which has been corroborated by a recent study done by the Ontario Ministry of Health, at the CIA spring meeting in March (tapes of her address are available through the CIA).

For example, Fulton found that hysterectomies are much more common in Winnipeg than in Toronto and in rural Ontario than in urban areas. For the other sex, prostatectomies were more common on the west coast than

the east coast. Is this the result of some environmental or genetic differences in the population, or is it a function of the per capita number of specialists, or some difference in medical theories and practice between the areas?

She also found that many tests are performed whose medical value is questionable, and some even identify non-existent conditions. Other procedures are used to prolong life for very short periods, while contributing negatively, if at all, to the quality of life.

Fulton concluded her talk at the CIA meeting by urging actuaries to get involved in solving the Canadian medicare problems. She was diplomatic enough to mention the contribution the profession could make to this field, not what it could have been doing for the past 30 years.

Actuaries could do more with their skills

Our training allows us to accomplish a great deal. We certainly know the effect that changes in practice or reimbursement methods have on incidence and cost of coverage. Actuaries are

trained to put a monetary value on probabilities that affect human beings, and medicare in any form offers a great opportunity to do so.

Actuaries should be able to suggest cost containment methods that do not reduce quality of care. I may be prejudiced, but I believe that actuaries have a better overall grasp of the problems than other professionals in the health field, including statisticians and physicians, who may focus too narrowly on their own specialty, and not really see the "big picture."

Health care reform in the United States will certainly change the work of the health actuary, but there will still be work to do, and it may be even broader and more challenging. Actuaries should be able to influence the course of health care reform in the United States more than they did in Canada, and I hope they seize the opportunity that most Canadian actuaries missed.

J. Bruce MacDonald, retired, does some consulting work for the Senior Citizens Secretariat of Nova Scotia.

IN MEMORIAM

Daniel Burke

ASA 1992, MAAA 1992

David A. Chan

FSA 1979, FCIA 1979, MAAA 1980, EA 1981

Charles D. Cox III

FSA 1976, MAAA 1977

William A. Drew

FSA 1958, MAAA 1965

Daton Gilbert

FSA 1946, MAAA 1965

Kenneth W. O'Neill

FSA 1978, FCA 1979, MAAA 1979, EA 1976

Henry F. Rood

ASA 1937, MAAA 1965, ACAS 1962, AIA 1962

Kevin Lee Spitzer

ASA 1988, MAAA 1988

Henry F. Rood, who died June 11 at the age of 87, was president of the Society of Actuaries from 1957-58. His service on the SOA Board of Governors included secretary-treasurer from 1949-52 and vice president from 1952-54 and 1955-57.

He also was co-founder and the first president of the American Academy of Actuaries. He spearheaded the effort to establish a national body to represent qualified U.S. actuaries of all specialties, beginning with his Presidential Address to the Society of Actuaries in 1958. In 1963, he organized a joint committee of representatives from the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the Fraternal Actuarial Association and the Society of Actuaries, which led to the four bodies approving formation of the Academy in 1964.

Rood held many leadership positions in the insurance industry

and in his community of Fort Wayne, Indiana. He was former chairman and president of Lincoln National Corporation and Lincoln National Life Insurance Company, where his career spanned 40 years.

Memorials can be sent to the Turnstone Center for Disabled Children and Adults, c/o Klaehn, Fahl and Melton Wayne Street Chapel, 420 W. Wayne St., Fort Wayne, IN 46802.

* * *

Obituaries detailing the careers of all deceased members are prepared by the Committee on Memorials and printed in the Transactions. Members with waivers of dues who do not receive the Transactions may request copies of obituaries on any deceased member by contacting E.J. Moorhead, chairperson, at his Directory address.