

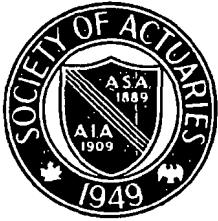


SOCIETY OF ACTUARIES

Article from:

# The Actuary

December 1975 – Volume 9, No. 10



# The Actuary

The Newsletter of the Society of Actuaries

VOLUME 9, No. 10

DECEMBER, 1975

## GROUP MEDICAL EXPENSE INSURANCE —PROGNOSTICATION

By Clayton A. Cardinal

*Editor's Note: We are pleased to publish this paper which was presented by Mr. Cardinal at the October 1975 meeting of the Wisconsin Actuaries' Club. Perhaps it will encourage other clubs to submit papers presented at club meetings for possible publication in The Actuary.*

Beginning with the last quarter of 1974 and continuing into 1975, the insurance industry has experienced a financial deterioration in medical expense insurance. Although the adverse impact of increased rates of inflation has been an important cause in this deterioration, its primary cause has been an inordinate increase in claim frequency rates. Beginning with the summer months of 1975 individual medical expense insurance claim frequency rates have begun returning to more normal levels. Group medical expense insurance claim frequency rates, however, have remained high.

Why have group claim frequency rates remained high? What can be expected for the future? What management actions are appropriate? This presentation is one actuary's attempt to answer these questions.

### Loss Toleration

When corrective actions to financial losses in individual insurance are ineffective, insurers tend either to withdraw from the market or to restrict their policies to such an extent that it can be considered as an effective withdrawal from the market. In recent years, there has been an increase in the number of insurers which have been unable to successfully manage their individual medical expense insurance, and therefore

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To All Our Readers,  
A Happy New Year!  
The Editors

### American Academy of Actuaries

At the annual meeting of the American Academy of Actuaries in October in Bal Harbour the following were elected to the Board of Directors for a three-year term: Thomas P. Bleakney, Herbert L. DePrenger, Edward H. Friend, Stephen G. Kellison, Frederick W. Kilbourne, P. Adger Williams.

The Board consists of 18 elected members (one third of whom retire each year), plus the officers and two past-presidents.

Thomas P. Bowles Jr. took office as *President* at the close of the meeting, succeeding Daniel J. McNamara. The Board elected the following officers: *President-Elect*, Robert C. Winters; *Vice-Presidents*, Dale R. Gustafson, M. Stanley Hughey; *Secretary*, Walter S. Rugland; *Treasurer*, James O. Webb. □

### P.L.H.

With this issue *The Actuary* loses one of its Editors, Peter Hutchings. Peter became an Associate Editor in 1969 and his has been a major contribution to *The Actuary*. His enthusiasm and sometimes pungent criticisms have also contributed to the morale of the Editors. We wish him well and say "Thank You" on behalf of the Society and of the other Editors.

ACW

## ONE HUNDRED YEARS OF INSURANCE SUPERVISION IN CANADA

by Richard Humphrys

This year, 1975, marks the hundredth anniversary of the appointment of the first federal Superintendent of Insurance, July 1, 1875. During that period of 100 years, there have been only six appointments to the office including the present incumbent. Five of the six incumbents have been actuaries and, except for the first two, each had a considerable period of service in the Department before his appointment.

The first Superintendent, J. B. Cherriman, was a professor of mathematics and natural philosophy at the University of Toronto.

Professor Cherriman, a graduate of Cambridge University, had been on the mathematics faculty at the University of Toronto for some years prior to his appointment. He was elected a Fellow of the Institute of Actuaries in 1875; *The Journal of the Institute* publishes a letter from him in the volume for 1871.

It fell to Mr. Cherriman to organize the supervision of insurance companies in Canada, both life and non-life, and he had much influence on the first comprehensive supervisory legislation applicable to life insurance, adopted in 1877. Many of the principles then established are still basic to the pattern of insurance supervision in Canada.

Professor Cherriman retired in 1885 and was succeeded by William Fitzgerald. Mr. Fitzgerald, a gold medalist in mathematics from the University of Toronto and a holder of a law degree, held the post until 1914, a period of some 29 years. These were years of great change and development in insurance supervision in Canada. In the 1880's, legislation was adopted controlling the activities of

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## Group Medical Expense

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port this observation. The first is that the number of persons becoming eligible for the labor market will not increase significantly due to the baby bust of the 1950's and 1960's. Even today fertility rates are decreasing. The second is that the number of people retiring in the next ten years is expected to continue increasing relatively in comparison to the total population.

If these demographic forecasts are realized, the increase in the demand for labor over the next ten years resulting from even "depressed" economic growth can be met only from the ranks of the currently unemployed. A decrease in the ranks of the unemployed, necessarily coupled with a return to a more normal movement of employees into and out of the active work force, can have only a favorable impact on group claim frequency rates over the long term.

### What Can Be Expected Over the Short Term?

Group claim frequency rates over the short term will likely be dependent upon what happens to the economy over the same term. It is worthwhile examining the several possibilities, each of which has a different implication for group insurers.

The most optimistic but least likely of the possibilities is that the economy will recover over the next six months. If the economy were to upturn, the demand for labor would increase, the ranks of the unemployed would decrease, and the normal influx of new and younger employees and the average age of employees would be restored. Obviously, a beneficial impact on group claim frequency rates would result.

A more moderate viewpoint is that the economy's recovery will take longer than six months, anywhere from 18 to 24 months. The consequent increase in demand for labor would take longer, and thus the realization of the resulting favorable impact on group claim frequency rates would be deferred.

A pessimistic viewpoint is that the economy will not really improve, that it will worsen after an apparent recovery. In such event, the consequent impact on group claim frequency rates would likely be adverse.

## Management Decisions

What group medical expense insurance management decisions are being made during these difficult times and what are their likely financial consequences?

It can be said that *all* insurers are significantly increasing their group medical expense insurance premiums. These increases are generally ranging from 20% to 40%. If the pessimistic viewpoint of the future economy materializes, these premium increases should prove to be inadequate, and group insurers in the aggregate should continue over the short term to sustain losses. If the moderate viewpoint of the future economy materializes, these premium increases *could* prove to be adequate, and the financial posture of group insurers *could* improve to a generally satisfactory level. If the optimistic viewpoint of the future economy materializes, group insurers should realize excess funds over and above those normally considered satisfactory.

In addition to increasing premiums, a number of the traditional and necessary management actions are required. Among these are (1) quality salesmanship, (2) proper selection, classification, and pricing of the group risks, (3) efficient administration, and (4) frequent and meaningful financial feedback. However, the management task in the future for success (survival) will require more than these. Foremost, an industry commitment to financial responsibility is mandatory. This commitment can be realized in part by each insurer's recognition and acceptance of a national economy dominated by Governmental interference with its consequent adverse effect on group medical expense insurance.

It should be evident that the insurance industry is being forced to underwrite the financial impact on its products of changes in the economy. The industry may not appreciate this infringement, but if it is to be successful, if it is to survive, it must accept the reality of its consequences.

Contrary to some opinion, insurance is not a risk capital venture in the usual sense. Nor is insurance gambling, although many insurers without realizing

it enter into what might well be called *gambling contracts without the necessary load in their premiums and then, when the losses appear, wonder what went wrong.*

Insurance is a sharing of the financial consequences of a reasonably predictable risk by a large number of people who have a reasonably homogeneous exposure to that risk. An insurer functions as the financial intermediary by which this sharing is realized. To the extent that an insurable risk is subject to forces extrinsic to itself, the financial impact of those forces must be anticipated and incorporated into the pricing of the risk. For group medical expense insurance what does this mean?

The two important forces extrinsic to group medical expense insurance are inflation and severe economic slow-down. In many group policies, premiums are guaranteed for the policy year. Although many of these premiums have anticipated to varying degrees the impact of inflation, few have provided for the effect which results from adverse changes in the rates of inflation. Further, few, if any, of these premiums have provision for the adverse effect of an economic slow-down.

Many insurers in adjusting their group pricing to anticipate the impact of inflation do so on a relatively undynamic basis and thus are always "catching up." For most of today's managements the adverse effect of a severe economic slow-down is a new experience. Its acceptance as a recurring reality generally will be slow and thus costly to many insurers, as acceptance of increasing inflation as a reality has proven to be slow and costly.

The economic climate for the future is uncertain. Group medical expense insurance over the short-term should be materially affected by and dependent on that climate. In order to succeed, insurers (1) will have to be able to react unilaterally to the effects of any adverse changes in the economy, and can do so only by removing from their contracts any legal incapacity to so react (that is, by eliminating the premium guarantees) or (2) will have to load their premiums against the risk of adverse changes in the economy; a less desirable choice because of the uncertainty of these changes. □

## 100 Years in Canada

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assessment type organizations which had then become quite active. In the late 1890's, the general legislation was amended to include investment powers applicable to all companies. Prior to that date, investment powers of individual companies were found in their separate charters. A Royal Commission investigated life insurance in Canada about the same time as the Armstrong investigation was active in New York. This Commission reported in 1907. A general revision of the insurance legislation took place in 1910.

The legislation of 1910 separated the governing legislation applicable to insurance companies from that applicable to other corporations and established the office of the Superintendent of Insurance as a separate department of Government. Prior to that, it had been attached to the Department of Finance.

Mr. Fitzgerald was succeeded in 1914 by George D. Finlayson. Mr. Finlayson started his career in the Department in 1907 and attained associateship in the Institute of Actuaries in 1911. He was a graduate of Dalhousie University, which granted him an honorary LL.D.

Mr. Finlayson held the position of Superintendent of Insurance until Jan. 1, 1948. This period of 34 years was one of much change and development in the insurance industry in Canada, and a period of many tensions, problems, and disputes.

It covered two major wars and the financial crash and depression of the late 1920's and early 1930's. It was also a period of much constitutional dispute between the federal jurisdiction and the provincial jurisdiction in the insurance field. The present pattern of supervision evolved from these disputes. The federal jurisdiction has authority in relation to the corporate powers and financial structure of federally incorporated companies and in relation to admission of companies from outside Canada and the establishment of financial standards for their continued operation in Canada. The provincial jurisdictions relate to matters having to do with the individual contract with the policyholders and the rights of the parties pursuant to these contracts. Provincial juris-

diction also applies to the licensing and regulation of agents and to all necessary supervision of companies incorporated within the provincial jurisdiction. As matters have evolved, more than 90% of the insurance business is transacted by companies under federal supervision with respect to their financial status.

Of particular interest to actuaries during this period was the legislation in 1919 requiring fraternal benefit societies to submit an actuarial certificate concerning adequacy of reserves. This had the effect of putting all such societies on a sound financial base. Also of interest was the amendment in 1927 withdrawing the prescription of a uniform basis for calculation of actuarial reserves for life insurance companies. Instead, the actuary was given a wide range of choices and required to give a personal certificate of opinion concerning the adequacy of the reserves.

In the 1919 Legislation there appeared for the first time a definition of "actuary" as a Fellow of the Institute of Actuaries, a Fellow of the Faculty of Actuaries or a Fellow of the Actuarial Society of America. The 1927 Legislation added Fellow of the American Institute of Actuaries. In 1970 "actuary" was redefined and Fellow of the Canadian Institute of Actuaries substituted for all the previous definitions.

Mr. Finlayson was succeeded, at the beginning of 1948, by R. W. Warwick, a graduate of Queens University and an associate of the Society of Actuaries. His service in the Department started in 1910. He, therefore, had had a very long period of experience in the Department prior to his appointment.

Mr. Warwick held the post until his retirement in February 1953. His period of service is noted for a major revision of the insurance legislation in 1950 affecting mostly investment powers and for changes that reduced the maximum proportion of profits from participating business that could be drawn off for the benefit of shareholders in the case of large stock companies. About that time, considerable interest existed in buying control of established Canadian life insurance companies and there was some fear that change of control might result in stripping of profits from participating business.

Mr. Warwick was succeeded in 1953 by K.R. MacGregor. Mr. MacGregor is

a graduate of Queens University with a degree in engineering and is a Fellow of the Society of Actuaries, having been vice-president of the Society 1963-65.

Mr. MacGregor's career in the Department started in 1926. Prior to his appointment as Superintendent, he had filled the offices of Chief Actuary and Associate Superintendent. As was the case with his predecessor, R.W. Warwick, he had a long period of experience in the Department.

Mr. MacGregor held the post of Superintendent until October 1964, at which time he resigned to take a position in private industry. This period of some 11 years was notable chiefly for legislation permitting life insurance companies to mutualize, for further revisions in investment powers and other corporate powers, and for general concern relating to the maintenance of Canadian control over financial institutions.

The present incumbent, the author of these remarks, is also a Fellow of the Society. His service in the Department began in 1940, another example of long experience in the work of the Department before his appointment as Superintendent in 1964.

The years since 1964 have been marked by legislation controlling transfer of shares of life insurance companies to non-residents, further expansion of corporate powers of life insurance companies and intensive study of financial reporting and reserve bases.

The remarkable record of having only six incumbents in a hundred years, most of whom had actuarial training and extensive periods of service in the Department before appointment, has resulted in a stability and continuity of supervisory procedures that have served the public and the industry well. Also, it has resulted in an appreciation of the importance of actuarial training in the field of insurance supervision and in the development of techniques that place much responsibility on and confidence in the actuaries who determine the actuarial reserves for life insurance companies. It is of interest to note that the present proposals under study by the NAIC would include an actuarial certificate almost identical in terms to the actuarial certificate that, for many years, has been an important part of the Canadian supervisory requirements. □