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ACCIDENT AND HEALTH INSURANCE TOPICS

1. What reserves are required for individual accident and sickness policies? How are they determined? What simplified methods can be used in obtaining them?
2. What is the actuary's responsibility for experience analysis? What information is required? What records are required? What simplified methods can be used to obtain this information?
3. What are the technical actuarial problems encountered in the development of new policies, and how are they solved?
4. What are the major current developments affecting individual accident and sickness insurance; for example, HEW survey, disability benefits under Social Security, HIAA "Blueprint"?
5. What actuarial problems are involved in making policy changes?

In opening the subject for discussion, MR. T. H. KIRKPATRICK drew attention to the need for actuarial analysis of problems in the individual accident and sickness insurance field and the need for actuaries to develop technical methods through discussion and papers to bring the actuarial theory up to the level now enjoyed by the life insurance business.

MR. R. H. MORSE explained that the Monarch Life established their reserves for their noncancelable loss-of-time policies using mid-terminal reserve factors developed from their own experience and varying by plan, age at issue, duration and terminal age. Normally, differences in elimination periods have little effect upon the reserve; and, accordingly, representative elimination periods are used in calculating mid-terminal reserves for each plan. For the noncancelable reserve on other types of benefits, Mr. Morse stated that they use approximations based on prospective methods. Mr. Morse also indicated that because of the nature of accident and sickness business, the solicitation, underwriting and claim experience of each company have considerable bearing on the resulting experience of that company; so that it is desirable for a company when it has a sufficient volume of experience to do so, to base its reserve factors on its own experience.

MR. H. A. LACHNER mentioned that the Metropolitan Life has voluntarily set up reserves for over 10 years on its loss-of-time policies that are renewable only at the option of the company. It was felt appropriate to establish such reserves since the right to refuse renewal is rarely exercised.

Describing the Metropolitan's reserve basis for such policies, Mr. Lachner said that the relatively high lapse rate during the early policy years is taken into account by calculating reserves on a 10-year preliminary term basis using factors based upon the Metropolitan's own experience. Reserves are computed separately for the principal sum benefit, for accident and for sickness total disability benefits. No reserve is held for partial disability or other supplementary benefits. Calculations are made for quinquennial ages using an average duration for blocks of business issued at the same premium rates. In the case of some old issues, premium deficiency reserves are set up where the gross premium is less than the valuation net premium at an age 10 years higher than the issue age.

MR. F. J. GAGLIUSO explained the method used by the Paul Revere Life in calculating reserves on noncancelable policies. For accident and sickness loss-of-time policies the net level premium method is used. For other policies, a two-year preliminary term basis has been adopted. Tabular reserves are calculated by the plan, year of issue and age method. Mid-terminal reserves are used throughout. Simplifications are extensively employed. For example, all occupational classes and waiting periods are combined and all frill benefits and exclusion riders are disregarded.

MR. S. F. CONROD pointed out the lack of tables covering accident-only benefits and explained that actuaries, therefore, have to be satisfied with taking a rough approximation applied to accident and sickness tables in order to establish reserves for accident-only coverage.

MR. C. N. WALKER called attention to some of the practical problems arising from the Task Force reserve recommendations. The tables of net annual claim costs and terminal reserves included in the preliminary drafts of the Task Force 4 report show separate and independent figures for each type of benefit. Thus, the actuarial functions to be used for the reserve computations for hospital room and board benefits are independent of the functions to be used for miscellaneous expense benefits. Similarly, the functions for surgical benefits are different from and independent of both the room and board benefit functions and the miscellaneous expense benefit functions. The result of this lack of relationships is that accurate computation of reserves for policies with a combination of benefits will be extremely complicated. Mr. Walker indicated that the problem becomes even more difficult for deductible policies with the degree of additional difficulty depending on which of the policy benefits are subject to the deductible amount. Mr. Walker concluded that these problems would prompt him to strongly urge that when reserve requirements are adopted by the states, whether by ruling or by legislation, two points be included:

1. The maximum possible latitude consistent with reasonable regulation should be allowed the individual company in establishing approximate reserve systems.
2. At least for a temporary period after commencing to accumulate reserves for any new benefit or policy, the maximum possible latitude consistent with sound regulation should be allowed the individual company in any demonstrations which might be required to show the adequacy of the approximate reserve system devised for such new benefit or policy.

MR. R. P. WALKER of the Wisconsin National pointed out that the maternity rates in the 1956 Task Force 4 tables were based upon population experience and are not indicative of insurance experience. Mr. Walker stated that the application of the Task Force 4 rates to their exposures during 1955 produced results which indicated that their true experience for all years of issue is at least 1.4 times as great as the Task Force 4 tables and in the early policy years, at least 1.7 times as great.

Commenting on this observation, MR. J. J. OLSEN called attention to the fact that reserves are affected more by the slope of the curve than its level and therefore the Task Force 4 tables are reasonably satisfactory for reserve calculations.

In discussing topic 2, MR. W. A. THOMPSON listed some of the more important considerations that tend to increase the responsibility of the accident and sickness actuary.

1. A comprehensive knowledge of the accident and sickness business based on experience is essential if the business is to continue to develop along sound lines.
2. Since significant claim experience is acquired much more quickly under accident and sickness insurance the study of a company's morbidity experience can be expected to yield meaningful results much earlier than in the case of life insurance.
3. Very little published experience under noncancelable insurance is available.
4. The need for expense control is especially acute under accident and sickness insurance in order that the maximum proportion of the premium may be available for benefits.

Mr. Thompson stated that the areas that are of primary interest to the actuary are the company's expense experience and morbidity experience. With respect to expenses he mentioned that the study of expense rates under accident and sickness insurance is similar to expense studies generally. He pointed out that perhaps the phase of experience analysis of greatest interest to the actuaries is the development of morbidity statistics in the form required for the calculation of premiums and reserves.

Mr. Thompson suggested that the principal records which a company should maintain include (1) a record of policies in force, (2) a record of issues, (3) a record of changes and cancellations, and (4) a record of benefits paid by type of benefit, for specific accounting periods, and under individual claims regardless of accounting period.

Noting that the general problem of simplification of the maintenance of actuarial records is vital to an accident and sickness program, Mr. Thompson concluded that it appeared that the simplification of the New York Life's A&S records will probably depend on mechanization to a large extent and that New York Life was studying the possibility of applying the IBM 705 to the routine maintenance problems. Such studies, however, were still in the preliminary stages.

MR. R. E. LARSON stated that in order to convince sales personnel and nontechnical executives of the need for reserves on cancelable business it is necessary to have exposure and claim data by type of benefit, occupation, sex, age and duration. Mr. Larson noted that the studies of the Benefit Association of Railway Employees showed that duration is relatively unimportant and that attained age is what counts. He said that lapse rates were also needed since the problem of reserves on cancelable business amounts to a gross premium valuation problem.

Describing the problems encountered by the Union Mutual Life in the development of new premium rates, MR. W. L. BARBER stated that since their commissions and expenses have remained stable their search for adequate, equitable and reasonable rates rested upon their assumptions as to morbidity. In the past the Union Mutual has used adjustments to the Conference Modification of the Class 3 Table. With the help of loss ratio studies further adjustments were made in the Conference Modification Table and commutation tables were prepared from which they calculated new gross premiums at quinquennial ages with intermediate rates interpolated using a Kingsland Camp interpolation formula. The problems encountered with the addition of a Business Woman's policy were met by assuming that the morbidity rates under the woman's policy were 150% of those under the comparable male policy. In addition, (1) the policy did not cover pregnancy, miscarriage or childbirth and (2) if not gainfully employed away from residence at commencement of disability monthly indemnity was reduced to one-quarter of amounts stated in the policy.

Mr. Barber concluded that in developing accident and health policies it would seem that the biggest problem is the lack of good experience tables and the element of subjectivity inherent in this type of coverage.

Other problems are the many variations in policies, provisions, sales methods, underwriting, and claim administration.

MR. H. C. UNRUH stated that the principal technical problems which an actuary faces in developing new coverages are connected with the calculation of gross premiums and reserves, and the maintenance of adequate statistics on the experience. In determining claim costs for gross premiums there is a large area where careful judgment is required. The type of insured, inflation, economic conditions and many other influences can have a marked effect on the level of claim costs. The importance of the experience of the actuary and his familiarity with the peculiarities of his company's business cannot be minimized since the claim experience reflects the effect of the company's sales philosophy, the make-up of its agency force, the quality of its underwriting and the attitude of its claim department. With respect to expenses, Mr. Unruh said that in his opinion the problem of allocation of expenses can be simplified if the administrative department is organized into divisions so that the major expense items can be directly allocated and minor miscellaneous items prorated. By examining the expense pattern for existing business it should not be too difficult to come to some reasoned conclusion as to what can be expected in the way of general expense and claim expense on the proposed new policies. Accident and sickness insurance requires the financing of new business. Initial claim costs are relatively high. The strain is particularly severe when new business expands and conservative reserves are held. Later reserves released on lapses offset a part of this strain. Recognition of these factors should be made in the calculation of gross premiums. As to the interest factor in gross premiums, he noted that since most coverages are limited as to term, a slight over- or understatement of the interest rate is not too significant an item, although the offering of paid-up hospital benefits at a given age such as 65 would make an error in this assumption more significant. Commenting on reserves Mr. Unruh suggested that if the general pattern of reserves can be approximated by application of composite factors this should be satisfactory since the calculation of precise reserves for the varying benefits becomes very involved and the expense incurred becomes prohibitive in a business where the expense factor already accounts for a very large part of the premium.

MR. C. D. WILLIAMS III reported briefly on current developments. He pointed out the continued social pressure for expansion of individual accident and sickness insurance. The Federal Government, in recognition of this, has introduced disability benefits under Social Security. Much of the problem of extending accident and sickness insurance to those not now insured or those inadequately insured is the lack of scientific cost information. These social needs will be met in one form or another and there is, therefore, great urgency for the development of a sound actuarial base on which this business can expand.

MR. J. J. OLSEN in discussing topic 5 outlined some of the change rules used by The Prudential Insurance Company of America. Where a request is made for a decrease in benefits, it is permitted based upon the premium at the original age for the reduced benefits, with the change being made only to a form, amount, and benefit available on the date that the changed policy will bear. Where a request is made for an increase in benefits, this may be accomplished only by surrendering the existing policy and completing a new business application for the total coverage desired. The new policy is issued at the attained age and is subject to all current underwriting requirements. Should a claim arise under the new policy which would be paid except for a waiting period requirement, the Prudential will pay the amount which would have been allowed under the previous policy, but not more than the amount that would be allowed under the new policy if there were no waiting period. Mr. Olsen noted that the Prudential will issue only one Individual Hospital Expense Policy per policyholder so as not to pay duplicate amounts under the special services benefit. This means that if the policyholder wants more coverage he must surrender his existing policy and apply for a higher benefit under a new policy. He stated that although this may not seem desirable, it appears to be the only practical method to follow. One possible solution to the problem of allowing more than one such policy to a policyholder is to charge a graded premium rate which would make the premium proportionately higher for a policy with smaller benefits than for a policy with larger benefits. Mr. Olsen commented on the fact that the Prudential receives many requests for changes from an individual to a family policy and that such requests were granted if the benefits remained the same or were decreased. The change is made at the original age and the original premium. Mr. Olsen also mentioned that he understood that some companies used a blended premium obtained by adding (1) the premium for the original benefits based on the original age to (2) the premium for the increase in benefits based on the present age.

With respect to a request for a change from a cancelable to a noncancelable type policy, MR. G. B. TROTTA said that the Metropolitan Life feels that the only allowance they can offer is that of issuing the new policy at the original age premium for the corresponding amount of benefit. Where the policyholder insists on a change from a 1-year maximum sickness benefit plan of their old cancelable policies to the 5-year or benefit-to-age-65 of a new noncancelable policy, he loses the existing dividend allowance (ranging as high as 29% of the annual premium).

MR. R. P. WALKER explained that the practice of the Wisconsin National is that where increased coverage is desired they will purchase as much benefit under the new policy form as is possible at the original age of the insured for the old premium and the balance of the benefits will be purchased at the premium rate for the current age at the date of change. When commissions are paid on the nonlevel basis, an adjustment must be made in the commission rate after the date of change. On policies with increased coverage, the Wisconsin National pays the new commission rate on the amount of increase in premium and continues to pay the renewal rate on the old premium. Mr. Walker also commented on the problem arising on family policies when the insured dies, saying that they are currently working on an endorsement form which will continue the old policy in effect on the balance of the family with an adjustment in the premium rate because of the death of insured. Where, however, only children remain or where only a spouse remains they will rewrite the policy at the attained age on an individual basis on the application of the guardian.

MR. R. H. MORSE spoke of the practice of the Monarch Life regarding the consolidation of multiple policies of an individual policyholder. Mr. Morse stated that their agents were encouraged to combine policies and were paid a bonus for such mergers. The Monarch continues commissions on the old premium plus new commission on any increased coverage. The new combined policy carries an adjusted age to give the policyholder credit for taking out part of the insurance at an earlier age.