TRANSACTIONS OF SOCIETY OF ACTUARIES
1959 VOL. 11 NO. 29AB

Group Insurance—Mortality and Morbidity Experience in 1958

A. What were the significant aspects of the mortality experience under group life insurance policies?

B. What were the significant aspects of the experience with respect to the various forms of group sickness and accident insurance—loss of time and medical expense insurance benefits?

C. What has been the recent experience under individual insurance policies converted from (i) group life insurance; (ii) group medical expense insurance plans? What charges to the group insurance are being made on account of converted insurance?

New York Regional Meeting

MR. ROY R. ANDERSON stated that the Prudential's 1958 group mortality rates were at the same level as for 1957 and approximately 4% above the level for 1956. For a volume of business of approximately 10 billion dollars which excludes Group Creditors and certain very large atypical cases, mortality costs per $1,000 of exposure were: 1956, $5.86; 1957, $6.11; 1958, $6.12.

The higher mortality in 1957 and 1958 appears to be attributable to last year's Asian "flu" epidemic. The extra deaths were not only those charged to influenza or pneumonia, but also the larger number which were precipitated by the "flu" but which were charged to the various degenerative diseases.

It is interesting to note that population mortality and the mortality of industrial policyholders during the last three years was consistent with the pattern of group mortality. The slightly greater increase in 1958 and 1957 over 1956 is attributed to the fact that these groups include children and elderly people on whom the "flu" epidemic evidently had a proportionately greater effect.

Those interested in following mortality trends closely may find the Morbidity and Mortality report issued weekly by the Public Health Service a good index. This report has only a 10 day lag and is helpful in estimating year-end death claim and dividend liabilities.

MR. JOHN C. ARCHIBALD indicated that the group mortality experience of the Bankers Life showed a slight continuing improvement during the five year period 1954 through 1958.

Because of the recent trend in granting higher nonmedical limits, particularly for small group cases, the Bankers Life has adopted a non-medical pool arrangement whereby any amount in excess of the non-medical limits in general use for group term policies in the early 1950's is pooled, with the estimated mortality in the excess amount charged each year rather than actual claims. The very limited experience to date with this plan has been satisfactory.

A medical pooling arrangement which has been in effect for some time has had consistently favorable experience. This pool was set up at a time when the Bankers Life was writing a considerable amount of group permanent insurance and much of the business is on an income endowment plan where the amount at risk decreases rapidly, particularly at the older ages. While too much weight can not be given to the results, the mortality experience for this pool has been less than 35% of CSO.

MR. MORTON D. MILLER reported on the progress of the NAIC subcommittee which is studying the use and application of minimum group life insurance rates under existing state laws. The first achievement was the promulgation by the five states concerned of the so-called N scale in 1958.

The second long-range phase was to develop a mortality table appropriate for group life insurance. The Commissioners appointed an Industry Advisory Committee to assist the Commissioners' Technicians Committee in this work. The discussions are still in the exploratory stage but it appears that there are three principal sets of pertinent mortality data: The Society of Actuaries intercompany experience, the 1958 CSO Table and its corresponding basic table, and the 1949–1951 U.S. Population Tables.

The Advisory Committee recognizes that, while the intercompany studies include a large volume of data, the number of participating companies is small. Consequently, the Committee is recommending that other companies writing group life insurance be invited to submit data. It also is considering bringing the intercompany studies up to date.

The next step indicated is the determination of margins suitable for the group life insurance business.

MR. STANLEY W. GINGERY opened the discussion of section B with a report of the Prudential's group sickness and accident claim experience.

In general, weekly indemnity morbidity has been fluctuating rather than showing an increasing trend over the years. For policy years ending in 1958 the Prudential experienced a loss ratio 4½% higher than that for prior policy years. It is believed this increase was temporary and primarily due to the effects of the 1957 business recession and the Asian "flu" epidemic of a year ago.

Hospital experience for policy years ending in 1958 showed a little more than an 8% increase in morbidity over the prior year. A study of calendar year 1958 claims indicates that the recession and "flu" epidemic are not entirely to blame for this increase and that relief is not in sight. Reference is made to the September 16–October 1, 1958 *Journal* of the American Hospital Association, captioned "Forces Affecting the Community Hospital Bill," for a thorough-going article on the causes underlying the irregular but steadily increasing trend of hospital claim costs.

Surgical claim costs for policy years ending in 1958 continued at approximately the same level as in the prior year. This reflects the greater effect of scheduling in this coverage and the more constant frequency rate experienced.

While specific figures are difficult to determine without special analysis, the experience under Comprehensive major medical coverages is expected to continue to reflect the high and increasing claim costs recently experienced.

As an added note, it was pointed out that the trend described above existed in spite of a slight reduction in the 1958 birth rate.

MR. FRED H. HOLSTEN reported that, as a result of the adoption of higher scales of premium rates and upward re-ratings at renewal, the New York Life's over-all 1958 group accident and sickness claim ratio showed a decrease of about 4% from 1957.

To eliminate the effect of changes in premium rates, the New York Life began in 1958 to relate claims to current standard premiums. Data for medical care coverages were studied by size (groups with less than 100 lives, 100 to 500 lives and over 500 lives), employee and dependent experience separately. The latest figures, corresponding roughly to policy years ending in 1958, show for the hospital coverage about a 4% increase in claim costs as compared to similar figures for the prior years. The pattern was consistent for each size category and for both employee and dependent coverage. Surgical costs remained steady.

While major medical claim ratios have increased over-all, it is difficult to estimate the effect that rapid changes in the composition of the business have had on the experience. The increase may be due, in part, to the greater proportion of plans covering in full the first $500 of hospital expenses.

MR. LARUE S. WAGENSELLER discussed the results of studies made by the Metropolitan in connection with group life and group hospital and surgical conversions.

At fairly frequent intervals the Metropolitan analyzes the mortality, withdrawal and other costs under individual life insurance policies converted from group insurance and compares them with similar costs under other individual life policies. In 1948 a change of practice took place.

Agents were no longer discouraged from submitting applications going beyond the conversion rights, either in amount or type of benefits. If the former group-insured employee applied for one of the new series of policies adopted in 1948 or for any other additional benefit not available under the conversion privilege, and satisfied regular underwriting requirements therefor, the policy which was issued was not classed as a conversion. If he did not qualify for the policy applied for, or if he originally applied only for benefits within the conversion privilege, a special policy without waiver of premium benefit was issued and classed as a conversion.

In anticipation of higher claim costs with converted policies under this new arrangement, the conversion charge transferred to the Ordinary Department was increased from $60 to $70 per $1,000. By the end of 1953 studies showed that, although the extra mortality was somewhat higher than anticipated, this was more than offset by increased savings on converted policies due to an upward trend in acquisition and underwriting costs under regularly issued policies. Hence, the charge was reduced to $65 for 1954 and remained at that level through 1958.

The latest study, completed last year, indicated a continuation of higher extra mortality and an upward trend in withdrawals. In consequence, the $65 conversion charge has been raised to $70 for 1959.

In regard to group hospital and surgical conversions, it was noted that Mr. H. A. Lachner described the Metropolitan's conversion practices on page 195 of Volume VIII of the *Transactions*.

A study of the Metropolitan's 1957 experience under converted policies represented about 12,000 exposure years on adults for both hospital and surgical policies. About 45% of this exposure related to male lives and 55% to females, including wives of male employees who converted to a family plan policy. For both sexes, approximately 20% of the exposure was at ages under 30. The exposure at ages 30 through 59 constituted about 35% of the total in the case of males and roughly 50% for females. Thus, as might be expected, there was a very substantial exposure at ages 60 and over, as the result of termination of group coverage at retirement.

Annual claim costs per unit of exposure among the adults included in this experience may be of interest and are given in the accompanying table.

Hospital policies issued below age 60 provide special services of up to ten times the daily benefit, while at issue ages 60 and over only five times is provided. The amounts of daily benefit range from $7 to $15. Although the most commonly issued surgical conversion policy has a $150 maximum payment for any one procedure, the schedule of indemnities which it provides compares very favorably, on the whole, with the regular $200 Group Surgical schedule.

In general, experience has been satisfactory and no conversion charge is made to the Group Department in connection with these conversions except in the rare circumstance where a conversion privilege is added to a group policy and made available to all employees previously retired. Nevertheless, group customers who have elected the conversion privilege have been advised that charges against their group experience would be necessary if the premium rates for converted policies proved to be inadequate.

The 1958 experience is expected to be quite interesting since the number of policies issued in the first half of that year was about 2½ times the number issued in the same period of 1957. Much of the increase occurred at ages 30 through 59.

Coverage and Plan	Age at Conversion	Annual Claim Cost per $1 of Hospital Daily Benefit (or $150 of Maximum Surgical Operation Benefit)	
		Males	Females
Hospital—31-day	Under 60	$1.40	$1.74
	60 or over	2.61	2.72
Hospital—70-day	Under 60	1.93	2.34
Hospital—120-day	Under 60	1.92	2.56
Surgical	Under 60	4.88	8.22
	60 or over	7.23	8.45

MR. CARL R. ASHMAN reported that The Lincoln National had recently completed a study of Mortality on policy conversions from group life insurance, covering issues of 1946 through 1956 carried to termination or policy anniversaries in 1957.

There was a total exposure of 8,051 life years for an amount of almost $20,000,000 and there were 257 claims for an aggregate of $573,000. Ninety of these 257 claims were incurred in the first year after conversion.

By far the heaviest excess mortality was in the age at issue group 15–34 and, similarly but not too surprisingly, in the first policy year—in each instance the excess mortality was more than twice that of any other age group or duration. There was, as might be expected, a steady decrease in extra mortality by duration and for policy years 6–11 combined the excess was less than 20% of that for the first policy year.

There was little difference in the experience by number and amount and, as a matter of fact, the experience by amount was somewhat better than by number.

Expected mortality was calculated both on the basis of Table X_{18} Select and Ultimate and on the basis of the 1946–49 Select Basic Table. The resultant extra mortality for the period studied, expressed in dollars and cents per $1,000 of insurance converted, was as shown in the accompanying table.

These figures are considerably higher than those obtained from a similar study made some years ago and reflect the greater proportion of eligible individuals applying for regular policies instead of conversion policies.

The current conversion charge is $65 per $1,000. While this is considerably less than the extra mortality costs indicated above, it is justified by the savings in commissions and underwriting expense.

Age at Issue	Extra Mortality	
	Table X_{18} S. and U.	1946–49 Select Basic Table
15–44	$ 43.62	$ 43.48
45–54	67.04	68.17
55–64	161.11	163.63
65–70	222.46	231.50 (65–79)
All Ages	$ 82.52	$ 87.75

A group medical expense conversion privilege was introduced in 1955. Although rates had been set so that these policies would be self-supporting, claim costs have recently been running a little in excess of 100% of premium. As a consequence, substantially increased rates have been recently adopted for new conversions.

At present The Lincoln National is not making any charge to their group policyholders for converted medical expense policies. If claim experience should continue to be unsatisfactory or if a conversion provision should be made mandatory, this decision will be reconsidered.

MR. MILLER reported that the Equitable had noticed a drop in the ratio of conversions to the total number of persons insured. This ratio had dropped from a constant .10% in 1952 to 1955 to .08% in 1956 and .07% in 1957. These ratios are practically the same when taken by amounts of insurance. This trend cannot be traced to any change in procedure and no ready explanation can be furnished. Converted policies increased in average amount from $2,630 in 1952 to $3,104 in 1955 and $3,586 in 1958. The age distribution of converted policies paid for in 1958 shows some tendency to increased conversions in the age groups 50 to 59 and 60 to 69, particularly the latter, as compared with the age distribution of the 1957 paid conversions. The 1957 distribution was fairly typical of the years 1954 through 1957. The age distributions are as given in the accompanying table.

The Equitable conversion charge has remained at $65 per $1,000 for several years. The last detailed study was done in 1954.

Turning to group medical expense insurance plans, the Equitable has had a conversion privilege available since 1954. Benefits under the converted policy are limited to hospital expenses for 31 days, 10×

Issue Age	Converted Policies Paid for in 1958		Distribution by Amount	
	Number	Average Size	Paid for in 1958	Paid for in 1957
10–19......	18	$1,812	0.2%	0.4%
20–29......	296	3,372	7.1	9.1
30–39......	578	5,398	22.1	22.2
40–49......	869	4,761	29.4	32.4
50–59......	933	3,505	23.2	21.2
60–69......	1,035	2,180	16.0	12.4
70 & over...	199	1,389	2.0	2.3
All.......	3,928	$3,586	100.0%	100.0%

prior to age 65, and 21 days, 5×, after age 65, and surgical benefits and in-hospital medical expense benefits. The amount of the benefits in the converted policy depends on the amounts for which the individual was insured under his group plan. The premiums are on a step rate by age basis and are at a relatively high level anticipating the heavy anti-selection possible. Technically the policy is not guaranteed renewable but the right to nonrenewal has been exercised only in cases of fraud, abuse or overinsurance.

Because the conversion option has not been widely promoted, relatively few converted policies are in force. The limited experience has been satisfactory. Termination rates have been very high, approximately 30% to 35% per annum. No conversion charge is made but the Equitable has reserved the right to impose one.

The Equitable still favors the continuance of health insurance on retired lives under the group plan with employer participation in the cost of the benefits. This arrangement is more economical and flexible than coverage through converted policies. For active employees, the need for a conversion privilege is minimized by the extended benefit provisions and the widespread existence of coverage.

Nonetheless the absence of a universal conversion privilege has been widely criticized as a significant weakness in insured plans. Furthermore, in accordance with legislation enacted last year in New York State, effective July 1, 1959, all insurance companies will have to make a conversion option available to their group policyholders. In connection with the changes the Equitable will have to make to conform to the new statutory requirements, they expect to carry out a complete review of their conversion program to see whether they cannot make it more attractive. They hope then to promote it more widely, without reducing emphasis on the continuation of coverage after retirement under the group plan, to the end that the conversion privilege may be available to as many employees as possible where continuation under the group plan is not afforded them.

MR. HARVEY J. SAFFEIR said that the Travelers Group Accident and Health insurance developed a loss ratio of 89.9% of net earned premiums. This was 8/10 of a point lower than for 1957. This improvement resulted largely from substantial rate increases on risks producing poor experience.

On employee coverage, an over-all frequency decrease of approximately 2% was noted. This varied considerably from line to line. Dependent coverages showed a frequency increase of approximately 3%. Both employee and dependent coverages showed a slight increase of duration of about 2%.

Omaha Regional Meeting

MR. JOHN R. WILLIAMS stated that although The Lincoln National premium rates were approximately 10% lower than the New York Minimum Rates, the claim ratio for 1957 was 60.6% of premium and for 1958 was 57.7% of premium.

Mr. Williams said that The Lincoln National commenced writing packaged group life plans in December of 1956. The plans were offered on the basis of no individual underwriting, with the maximum amount of insurance on any one life being 2½ times the minimum amount up to $10,000. By the end of 1957 a fairly substantial block of business had been accumulated but the experience was very poor. The claim ratio was about 100% of premiums and group underwriting was no longer offered on groups of 10 to 25 lives. In November of 1957 each member of such groups was checked through index and any impaired lives were rated. From these findings and underwriting information, a case was accepted or rejected. At the present time, the loss ratio on this business is 57.9%. The annual claim rate per 1,000 by amount is 6.06 and by lives is 4.46, which indicates that a good deal of selection is still present.

MR. JOHN C. ARCHIBALD repeated the information he had given at the New York regional meeting.

MR. HARRY L. SUTTON, JR. reported claim costs of The Prudential's group life business for the last three years as given by Mr. Roy R. Anderson at the New York regional meeting, attributing the higher mortality in 1957 and 1958 to the effects of the Asian "flu" epidemic.

He said that in order to follow trends in group mortality more closely, Prudential is making use of information available in the Morbidity and Mortality report issued weekly by the Public Health Service. Recent weekly reports indicate that claim levels in late 1958 and early 1959 have continued to be somewhat higher than the average of the four preceding years. The excess is markedly less than that shown in the preceding year.

Concerning section B, Mr. Sutton said that during 1958 The Prudential experienced increasing claim costs in most lines of group sickness and accident insurance. Although increases in costs in the area of hospitalization were undoubtedly influenced by a continuation of the upward secular trend of the cost of medical care, part of the increased cost was felt as being due to the business conditions which prevailed in the last part of 1957 and early 1958. The effect of business conditions was felt to be more pronounced on weekly indemnity insurance. Other comments on group weekly indemnity and hospital expense insurance experience of The Prudential had been given by Mr. Stanley W. Gingery at the New York regional meeting.

Because of the complicated factors involved, Prudential has not yet completed an analysis of the effects of the secular trend and other influences on major medical costs in 1958, but some increase has been evident in integrated plan experience.

MR. CARL R. ASHMAN repeated the discussion on section C which he had presented at the New York regional meeting.