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EMPLOYEE BENEFIT PLANS

Insurance

A. Medical Expense Insurance

Insurance companies generally have been faced with high loss ratios under certain forms of medical expense insurance coverage.

1. What factors have contributed to these high loss ratios?
2. What steps are being taken upon renewal of such policies to improve claim ratios, and how effective have these steps been? What are the prospects that these steps will become more effective in the future?

B. Underwriting

1. Most outstanding credit group life insurance involves obligations, arising from the purchase of consumer goods, and repayable in installments over relatively short periods of time. What group insurance or similar plans have been developed to insure long-term installment obligations, such as those resulting from real estate mortgages or the systematic purchase of shares in a mutual fund? What underwriting and administrative problems are involved in these developments and how effectively have they been met?
2. What types of group insurance or similar plans are currently being issued to cover members of professional associations and similar groups? What underwriting controls are used to avoid adverse selection and how effective have these controls been? What sales and administrative problems are involved and how effectively have they been met?

MR. DONALD D. CODY noted that loss ratios are very high on both base plan medical care coverages and comprehensive major medical coverages. Premium rates vary among companies over a range of 5% to 10% on base plans and over a range of 10% to 25% on comprehensive major medical plans, with considerably more variation in the latter in some locations and for some age-salary distributions. His analyses indicate that many companies probably will experience average loss ratios in excess of 90% of their manual rates by early 1960 on all medical care packages for cases of under 100 lives. Thus, some companies will use rates at renewal above the manual rates for new cases.

Several causes of this situation are:

1. Upward trends in medical care benefit rates, of about 5% annually for hospital and in-hospital medical benefits, 1% to 2% on schedule surgical benefits, 4% for basic medical care packages, and 7% for comprehensive major medical

benefits. These increases result primarily from growing complexity of medical care and, to a lesser extent, from unnecessary use of facilities and services and fee-making abuses.

2. Lack of proper record-keeping, due to pressures to reduce expenses, has made timely actuarial analysis difficult. Actuaries have been unable to exercise their traditional responsibilities in this area or have had insufficient authority to do so.
3. Acceptance of transfer business by many companies at manual rates results in a flow of thousands of cases which are on the average substandard. This has an adverse effect on loss ratios for the industry and presents a serious obstacle to scientific renewal underwriting.
4. The necessity to keep group field forces in production in a competitive market has affected rates and loss ratios.

Mr. Cody stated that the Society should develop techniques for collecting current morbidity data relating loss ratios to a standardized premium basis which companies can relate to their own premium bases. Experience on typical benefits for cases of under 100 lives for a few companies operating nationwide should be studied, but great detail of analysis is not needed.

For example, a New York Life study of nonmaternity experience for about 150 cases of less than 100 lives with comprehensive major medical coverage for policy years ending before July 1959, related to rates used for new cases in the fall of 1959, shows the results by area as shown in the accompanying table.

For instance, the table shows that New York Life loss ratios in Phoenix are 17% above the average, but that other company premium rates in Phoenix average 8% below New York Life's.

The statistically undependable data on which much of this table is based might develop significant geographical results that would be especially valuable if they were combined with data from other companies. Such studies could go far to dispel ignorance as a basic cause of problems in the group business.

The table also shows that hospital room and board charges reported in the recent Health Insurance Council–American Hospital Association survey are a poor key to costs in an area. The HIC-AHA survey is not consistent with New York Life's own July 1959 survey of such costs in California, which indicates charges 5% higher on the average. The HIC-AHA survey included only 80% of the number of beds in New York Life survey. New York Life's surveys have indicated an increase of about 9% in ward room charges from mid-1958 to mid-1959 and 7% in semiprivate charges in California. However, the HIC-AHA survey is of considerable value if used with caution.

Cases Located in City:	Exposure (Annual Premium Earned, in Thousands)	N.Y. Life Geographical Premium Rate Index	Other Company Premium Rate Index*	Loss Ratio Area Index†	HIC-AHA Room & Board Index
Atlanta	$ 12	85%	98%	98%	62%
Baltimore	22	85	104	86	81
Boston	10	100	101	125	115
Butte	32	92	90	102	70
Chicago	166	92	104	104	94
Cleveland	10	108	93	75	116
Dallas	26	92	100	105	69
Denver	70	85	103	133	75
Des Moines	10	92	90	60	64
Detroit	20	100	98	83	96
Houston	14	115	86	198	67
Los Angeles	427	131	91	98	121
Milwaukee	30	92	98	95	87
Minneapolis	3	100	99	235	99
New Orleans	9	92	88	99	68
New York	81	100	100	100	100
Oklahoma City	14	77	100	88	62
Philadelphia	13	92	99	59	79
Phoenix	241	100	92	117	90
Portland	18	108	95	67	99
Salt Lake City	58	85	102	96	70
San Francisco	94	115	102	74	120
St. Louis	49	85	100	96	76
Seattle	10	115	91	121	112
Tampa	27	92	90	132	67

* Average ratio to New York Life rates of rates charged by 12 other companies in this area.
† Ratio to New York Life's nationwide loss ratio of loss ratio to manual rates experienced in this area.

MR. J. BRUCE MACDONALD reported that the Crown Life has experienced high loss ratios on in-hospital medical and supplementary accident coverages, despite premium rates higher than the majority of companies.

High charges by some surgeons and psychiatrists are two main reasons for high loss ratios on comprehensive major medical, along with general increases in costs of medical care and sharp increases in certain areas. The cost of eliminating deductibles and/or coinsurance for hospital and surgical expenses has been greater than anticipated, and deductibles of $25 have little influence in reducing claims.

In May 1959, Crown Life increased all comprehensive major medical rates by 5%, and increased the charge for eliminating the deductible and coinsurance on hospital expenses. Plans with $25 deductible, and with

elimination of coinsurance or deductible on surgical expenses, are no longer offered.

A considerable amount has been saved by a psychiatric limitation excluding claims for employees unless absent from work and for dependents unless hospitalized. All policies now also include a relative value schedule of units allowed for surgical and medical procedures. Dollar values are assigned to each unit according to income and location of the insured, based on geographical variation shown in the 1957 Study of Group Surgical Expense Claims (*TSA* X, 359).

Experience has been poor in Louisiana and in Texas in areas outside major cities, so additional premium rate increases were made in these areas.

Satisfactory results have been obtained from very careful underwriting of transfer business.

MR. FRANK W. BIESE noted that such nonrecurring factors as the influenza epidemic contributed to high loss ratios, along with trends toward increased cost of medical care and increased utilization. Increases in cost of hospitalization have been somewhat greater than for other types of medical care. Other factors are local traditions of medical care, such as hospitalization for care of illnesses which would ordinarily be treated in a doctor's office in other areas, and poor plan design.

Examples of benefit features which may encourage abuse of one type of facility with antiselection and resulting higher claim costs not allowed for in premium rates include low deductibles and/or full payment areas on miscellaneous expenses which are not subject to adequate controls, waiver of deductibles and/or large full payment areas for hospital and surgical expenses, and 80% of surgical fees in excess of the scheduled amount without a deterrent corridor deductible.

Corrective action can best be taken at time of plan revision, and sound advice should be given to the employer at that time. Experience must be analyzed to determine causes of poor experience. With proper education of employer and employee, it may be possible to change the plan to place greater stress on deductibles and coinsurance and to discourage unnecessary hospitalization. Meetings at the local level between the insurance industry and doctors and hospitals are beneficial to proper understanding of the purpose of the plan.

New concepts in medical care, such as the new progressive patient care idea for hospitalization, must be recognized. Constant rate increases are not the answer because the ability of employer and employees to pay for a plan are limited. Premium rate changes made at the time of plan revision should allow for upward trends in claim rates. Where the Metropolitan

finds that rates are below those used for new business and experience is marginal, rates are commonly increased to the new business level.

Prospects seem brighter for better plan design and Major Medical experience as companies give more attention to plan design and develop better claim statistics as standards against which to measure experience in establishing a proper level for new business rates.

MR. DONALD C. PAILLER urged consideration of more frequent changes in manual rates to recognize the effect of upward trends in medical expenses. The Prudential was considering an automatic increase in manual rates of $\frac{1}{2}\%$ per month, for example, for a coverage where past experience indicates a continuing annual increase of about 6% in claim levels. Such a change would avoid the need for the drastic rate increases required to produce renewal rates which cover expected claims for the coming year when manual rates have not allowed for this upward trend. It would also educate policyholders and sales force to expect upward trends in rates.

MR. DON F. FACKLER compared the coverages (comprehensive major medical, hospitalization, and comprehensive medical care) on which loss ratios have been high with surgical expense and weekly indemnity coverage, on which the Lincoln National's loss ratios have been particularly good. The latter are characterized by scheduled benefit limits and absence of optional use of the coverage.

For the coverages with poor experience, there is generally an area of little effective coinsurance, opportunity for overutilization, automatic reflection of the rising cost of medical care, duplicate coverage, excessive charges, or a coverage of noninsurable charges. Increased premiums are not an adequate solution to the problem and contracts must be written to limit abuse effectively. It is primarily the responsibility of the insurance company to provide proper benefits and safeguards at renewals and for future new coverages.

The Lincoln National is currently offering a plan of comprehensive major medical with the following characteristics:

1. Dollar amount limits apply to hospital room and board benefits by area and 20% coinsurance applies to hospital special charges.
2. A realistic relative value fee schedule limits surgical benefits.
3. A $35 deductible with 90 day accumulation period applies to expenses other than hospital and surgical.
4. Coinsurance is required and a maximum dollar payment by the insurance company is specified for medical care.
5. Payment of drugs out of the hospital is eliminated, because the expense of claim control is too high.
6. An antiduplication clause is used.

This Controlled Major Medical Contract provides reimbursement for catastrophic illnesses and for controllable small claims but does not invite luxuries and overutilization to the extent that the patient shows a profit. Its practical use is limited to those cases with assured employer cooperation.

The industry is in definite danger of being unable to control further rises in costs of disability insurance unless it follows four basic principles in development of contracts which are necessary for adequate protection: the loss insured against should be infrequent in occurrence, it must be of substantial financial consequence, it must be beyond the insured's control, and it must be of a definite measurable amount when the contingency occurs.

Mr. Fackler also cited the difficulty of comparing premium rate bases between companies and the importance of comparing manual rates for old and new plans on transfer business. Intercompany data would be particularly useful for area rate making.

MR. ROBERT N. STABLER noted that competitive pressures within the industry have resulted in premium rates which contain little if any margins, underwriting practices which are overly optimistic, and failure to stress the necessary cost controls at the time a plan is sold.

He reported that a re-examination of company objectives for its group accident and sickness line led the General American to make a drastic premium rate increase on Major Medical coverage, averaging 50% over previous rates. Sales efforts were shifted from low net cost selling to emphasis on pointing out the true cost of insurance and selling imaginative and intelligent service to the policyholder, even at the risk of a decline in volume in force.

A formula approach was adopted for setting renewal premium rates. This renewal formula is designed to raise rates for the class of business as a whole to an adequate level and to establish reasonable equity among policyholders when complemented by the dividend formula. The formula applies credibility factors to the spread between the group's experience and the norm for its class and allows for trends in medical care costs. The rare deviations from the renewal increase specified by the formula usually involve groups for which the formula specifies a very high renewal rate level.

The following table indicates the spread produced by the formula on comprehensive major medical groups (in terms of the high 1958 manual rates) renewing in the first 6 months of 1959:

Rate Level after Renewal	Distribution of Groups
Below Manual minus 35%	2%
Manual minus 35% to Manual minus 26%	5
Manual minus 25% to Manual minus 16%	21
Manual minus 15% to Manual minus 6%	31
Manual minus 5% to Manual plus 5%	31
Manual plus 6% to Manual plus 15%	7
Manual plus 16% to Manual plus 25%	3
Above Manual plus 25%	0
Average: About Manual minus 5%	

The field man is supplied with complete statistical data for each group to support the sale of the premium increase but he must decide how it shall be used in this effort.

Mr. Stabler stressed the importance of education of the field force to understand renewal practices and the rationale behind them. Effective communication with the field force and introduction of a persistency factor in the bonus program for the field man have kept cancellations to a minimum.

The use of cutbacks in benefits at renewal will become more prevalent and more effective in the future, since the limit of the policyholder's ability and willingness to pay for insurance is being approached. It is likely that policyholders will adopt cutbacks from first dollar coverage rather than cutbacks from the maximum amount of coverage.

Sales efforts are directed toward placing the premium increase without a change in plan and to cut back benefits only where necessary to conserve a group. A considerable number of comprehensive major medical groups have been changed by increasing deductibles, or by changing plan design as indicated in the accompanying table.

Type of Plan	Distribution of Groups	
	Before Renewal	After Renewal
A. Coinsurance and deductible apply to all charges	2%	40%
B. No deductible for hospital charges, no coinsurance on certain hospital charges, otherwise same as A	25%	17%
C. No deductible for surgical charges, otherwise same as B	73%	43%

Claim experience on cut-back plans is inconclusive.

To inform employees of the purpose of group insurance and to eliminate misunderstandings as to costs, several colorful posters have been distributed to policyholders for posting on bulletin boards.

Efforts have been made to apply a reasonableness test in determining whether to honor full surgical fees in claim payments. However, progress in this direction is slow until the general public and medical profession understand the intent of the coverage.

The General American has always based quotations for large transfer business groups on the experience of the previous carrier. In April 1959, a previous practice of ignoring experience for small cases because of its statistical unreliability was abolished, and a 10% loading is automatically applied to medical expense coverage for any transfer case.

The effect of the program to date has been a 20% reduction in loss ratio on comprehensive major medical coverage from that of a year ago, and a 15% reduction in loss ratio for basic hospital coverage. There has been a 40% increase in number of groups lapsing, mostly in the very smallest size category.

MR. JAMES F. COLEMAN cited several instances where the New York Blue Shield has found it necessary to put greater emphasis on sound group underwriting. Adverse selection made it necessary to discontinue the underwriting of routine physician home and office call coverage for groups of under 26 employees. Certain community enrollment programs failed because construction of unnecessarily large hospitals in an area resulted in overutilization. The Blue Shield also plans to study the effects on claim rates of duplication of coverage.

He also noted with favor the current increased emphasis on underwriting of group medical care risks by insurance companies.

Mr. Coleman felt that much of the blame for high loss ratios which has been attributed to hospitals and doctors and ascribed to abuse of coverage properly belongs on the group underwriters for an improper approach, either in the setting of premium rates or in lack of controls for comprehensive major medical. This resulted from determining such rates by extrapolation from major medical costs rather than by adjustments from realistic estimates of costs of full basic coverage.

Mr. Coleman also stressed the importance of considering the human element in predicting costs of coverage. For example, a 50% increase in frequency of claims for surgery outside the hospital was not abuse, but rather arose because of the existence of insurance, which changed the economics relationship between doctor and patient. Similarly, existence of insurance has changed the status of many patients from ward service to private patients, so that bills are now rendered for service performed. Thus, despite a modest increase in availability of hospital beds, a 15% rise in in-hospital medical claims was experienced by Blue Shield in a two year period.

MR. JOHN C. ARCHIBALD reported that the Bankers Life has experienced increases in claim costs of 7% to 8% for basic hospital coverage and 10% to 12% for comprehensive and major medical. He noted that these trend rates were higher than reported by Mr. Cody.

He attributed high loss ratios primarily to the insurance industry's failure, because of competition, to increase the premium rates at the same rapid rate at which claim costs have been increasing. He cited one employer who had changed insurers in four successive years in order to continue coverage without increases in premium, although each carrier suffered losses on the coverage, as an illustration of one factor contributing to high loss ratios.

MR. L. S. NORMAN, introducing section B, noted that the relatively large amounts of insurance per life in a mortgage credit group life insurance plan invite antiselection, involve an insurance cost which both lender and borrower are loath to have added to the cost of the loan, and may disturb agents who have successfully used individual policies to meet this insurance need. Because of these difficulties, a group mortgage policy offered by the American United Life covers only a specified number of monthly loan payments (from 12 to 60) with a maximum amount of either $5,000 or $10,000, or the outstanding balance of the loan if less.

A constant premium per month per $100 of monthly payment is paid by each borrower, according to his age at inception of his coverage. The maximum entry age is 60. Individual underwriting is used only if coverage is offered to existing borrowers. Thus the lender's cooperation to avoid abuse is essential to continuation of the plan.

This coverage is sufficient to meet payments for a long enough period to prevent distress sale of the home, but does not bring coverage into much direct conflict with individual policy insurance needs. Its low cost encourages higher participation, and grading of rates by age encourages higher participation of younger borrowers. For the plans which provide 12 or 24 months' payments, the cost is at a level which the lender may be willing to absorb.

The use of age-graded rates has developed an average age of enrolled lives of 34, compared with an average age 45 for plans on which the same rates were charged borrowers at all ages. Claims experience, while not yet conclusive, has been very favorable, with a ratio less than one-third of that on the flat-rate plan. The lender's administrative complications in accounting for premiums are not especially different from those for flat-rate plans, but unfamiliarity with the plan produces some added sales resistance.

MR. ARTHUR W. ERICSON noted that the basic problem is whether

the underwriting principles of regular group creditors insurance can be extended to cover mortgage creditors insurance and the many other types of credit to which credit life insurance is being extended.

The Prudential decided that to do a complete job it must offer coverage for the full amount of indebtedness to a maximum of $20,000 where permitted by statute. Mortgages eligible are limited to those on dwellings occupied as the borrower's home. The amortization period must be between five years and twenty-five years with maturity before the borrower's 70th birthday.

The larger amounts of insurance and longer duration of coverage require that underwriting be more conservative than for regular creditors business, and this more conservative underwriting permits the use of liberal maximum amounts of insurance regardless of size of case. The lender's underwriting of the credit risk is not considered adequate as an underwriting control for the insurance risk, despite the greater conservatism of credit underwriting for these large amount long-term obligations.

Thus the Prudential requires evidence of insurability for borrowers age 50 and over, and at lower ages applies a normal activity test similar to the actively at work test used for employee group life insurance. Evidence of insurability may also be called for on all new applicants if the group fails to maintain a 50% participation requirement. Evidence of insurability is required for all existing mortgages because achievement of a satisfactorily high participation requirement is generally unattainable. Mortgagors must be discouraged from changing lending institutions for the purpose of obtaining insurance. Evidence must be required with respect to increases in mortgages to prevent adverse selection.

Premium rates must be set so that cost of insurance for borrowers in all age groups will be reasonable and equitable so as not to discourage participation at young ages. The use of a flat monthly rate for all ages inherently favors the older age groups and would lead to further antiselection by age.

The Prudential charges premium rates graded by age group at inception of coverage with premiums payable for two years less than the duration of mortgage installments. The level premium charges produced by this method are close to annual yearly mortality cost, since the amount of insurance decreases as current mortality rate rises. The approximate equality holds for virtually all variations in amortization period and entry age.

This method is considerably simpler than any alternative method under which premiums are adjusted periodically to reflect increase in mortality rate with attained age, or any arrangement under which costs of insurance

are covered by increases in interest rates charged by lender according to current attained age. The latter method would particularly cause administrative complications in achieving equality between cost of insurance to the lender and charges made to the borrower.

The principal problem is that of making the lender appreciate the importance of making the insurance program an integral part of the lender's service and encouraging high participation in the insurance plan to assure the adequate exposure necessary for underwriting safeguards to become effective.

Savings banks, savings and loan associations, and commercial banks have been the main sources of sales activity.

With respect to professional association underwriting, MR. ROBERT C. TOOKEY noted that bar associations and medical and dental associations are principally interested at the present time. Life insurance and accidental death and dismemberment coverage can be underwritten for such groups without evidence of insurability provided a minimum enrollment of 20% is required and a uniform amount of insurance offered to all members. A limiting age of entry into group is desirable. Members must be required to be actively at work and may be required to state whether they have been hospitalized within the past year or whether they have recently had any of several major diseases within the past five years. More lengthy nonmedical questionnaires may be required of applicants reported from other sources to have serious impairments.

In order to secure satisfactory enrollment, a vigorous solicitation effort is necessary. The agent or broker conducting solicitations should be one who is known to the association membership (such as the malpractice insurance broker for a medical association). The broker should be prepared to invest money in the cost of solicitations in the first year which will not be fully compensated until renewal years.

In many states individual policies must be used because Group Insurance for professional associations is not provided for under the standard group law. Since a member may remain qualified for insurance by remaining in the association and paying his dues, there is no need for a conversion privilege.

Plans with amounts of insurance decreasing by age are preferable to assure minimum antiselection and maximum persistency, since step rate flat amount plans force a decision on possible discontinuance of insurance each time the rate increases.

Relatively low participation requirements are justified by the adequate premium rate margins in the standard CSO table, since an anticipated loss ratio of about 50% on this table allows ample margins for some substand-

ard mortality. Where enrollment is so low that statements of health are required, exceptionally low loss ratios should be expected in early years because of this medical selection. However, these unusually low loss ratios in the early years should be discounted for experience rating purposes.

If members are allowed to secure additional amounts of insurance with medical evidence to supplement basic amounts provided without evidence, claims experience in early years may be improved considerably. For example, election by 10% of the enrolled members to be insured for an additional $40,000 of insurance above a basic $10,000 amount should reduce the initial claims ratio by more than 20%.

No form of medical expense coverage can soundly be written on an association basis, because the adverse selection implicit in a 20% enrollment would produce astronomical loss ratios for this coverage.

Persistency of enrollment tends to be good because professional men have ample ability to pay and because they are aware of the advantages of the plan.

A group life plan for a professional association offers splendid advertising of a company for follow-up ordinary insurance sales. However, extension of mass marketing to professional occupations can damage morale of ordinary agents for whom professional men represent an important market.

It is expected that interest in professional association life insurance will increase as the industry continues its efforts in this field, and attempts have been made to include professional association groups in the group insurance codes in some states.

MR. RICHARD J. LEARSON reported that the Mutual Life of New York has underwritten several association groups by using its agency force to help enroll the membership as a supplement to a broker with a close association contact. Agents enrolling members are paid a commission from the first semiannual premium for the member.

A relatively low participation level is set for acceptance of all initial applicants, but continuing mail and face-to-face solicitation campaigns are used to obtain a satisfactory final enrollment result. More than 50% enrollment is generally attained below age 40 but the percentage enrollment declines rapidly beyond that age, even where there is guaranteed issue.

Individual policies are used where group contracts cannot be issued. These individual policies contain group-type provisions. The conversion privilege is essentially the group policy provision, with no right to convert for five years except upon leaving the association.

The use of a decreasing amount of insurance schedule is a substantial underwriting control. A strong statement about active full-time work is

used in solicitation material and in the application. The health questions asked in the application are those used for baby group cases. A brief credit report is used for applicants at higher ages. In general, professional men tend to supply more information than would normally be elicited by the questions asked on the application.

It is hoped that some of the initial mortality gains in early years can be withheld to cover expenses and to build up some margin for contingencies for use in the renewal years when step-rates rise.

MR. JOSEPH W. MORAN summarized certain mathematical analyses which had been made by New York Life as to the relationship between level of participation among members and anticipated mortality ratios for professional association plans.

One conservative technique used for analysis is to assume that mortality experience for the entire group will be that characteristic of standard employee groups and that every eligible member who fails to enroll is a standard risk by ordinary insurance selection standards. A summary of the results of this analysis is given in the accompanying table.

The table shows clearly that a much higher level of enrollment is required at higher ages to achieve any desired mortality ratio than is required at lower ages. For a group of eligibles uniformly distributed over ages 25 to 70, a relatively low enrollment at the younger ages will produce reasonable mortality ratio, but the risk of a high mortality ratio increases as the opportunity to enroll without evidence of insurability is extended to members at higher ages unless there is a commensurate substantial increase in the level of enrollment required.

For any group the results of such an analysis will vary from those shown, according to the age distribution of eligible members and the effects of varying participation in the various age brackets, but the table has been useful as a guide toward setting minimum enrollment requirements for automatic acceptance at the younger ages when allowance is made for these variations.

In general, the heavy concentration of exposure at higher ages on a level-amount step-rate plan means that a very high level of enrollment is required to achieve a reasonable mortality ratio objective. Thus it may not be feasible to offer an expectation of automatic acceptance on a realistic and sound basis.

New York Life has promoted the use of decreasing term plans with level premium by age in the professional association market. The greater soundness of such a plan permits more liberal underwriting and offers prospects for dividends as a source of funds for the association's charitable or educational activities. Where it is desirable to offer a plan with more adequate

PROFESSIONAL ASSOCIATION LIFE INSURANCE PLANS CORRELATION OF MORTALITY RATIO WITH LEVEL OF ENROLLMENT

Entry Ages	Average Mortality Rates			Mortality Ratio to 1941 CSO with		Enrollment Needed for§			
	1941 CSO Table*	Standard Employee Group†	Standard Select Ordinary‡	20% Enrollment	50% Enrollment	75% Ratio to 1941 CSO		60% Ratio to 1941 CSO	
						(a)	(b)	(a)	(b)
	A. Variation by Age Group								
25–29....	3.423	1.162	.922	.620	.410	.146		.212	
30–34....	4.388	1.551	1.100	.765	.456	.206		.294	
35–39....	5.868	2.395	1.728	.863	.522	.250		.372	
40–44....	8.131	3.945	2.658	1.118	.643	.374		.580	
45–49....	11.589	6.439	4.112	1.359	.756	.508		.819	
50–54....	16.866	10.016	6.152	1.510	.823	.595		.974	
55–59....	24.894	15.351	9.312	1.587	.859	.645		....	
60–64....	37.066	22.960	13.822	1.606	.866	.654		....	
65–69....	50.540	30.554	17.694	1.622	.859	.636		....	
	B. Aggregate for Level-Amount Step-Rate Premium Plan								
25–39....	4.560	1.703	1.250	.771	.473	.209	.070	.305	.102
25–44....	5.452	2.263	1.602	.900	.536	.266	.118	.396	.176
25–49....	6.680	3.098	2.104	1.059	.613	.342	.190	.522	.290
25–54....	8.378	4.251	2.779	1.210	.683	.420	.280	.655	.437
25–59....	10.737	5.837	3.712	1.335	.742	.490	.381	.778	.605
25–64....	14.028	7.977	4.976	1.424	.783	.541	.481	.872	.775
25–69....	16.288	9.400	5.760	1.471	.801	.564	.564	.907	.907
	C. Aggregate for Level Premium Decreasing Amount Plan								
25–39....	100	36.70	27.15	.749	.463	.200	.067	.291	.097
25–44....	100	39.66	28.54	.841	.508	.239	.106	.353	.157
25–49....	100	42.84	29.93	.945	.548	.286	.159	.429	.238
25–54....	100	45.60	31.02	1.039	.602	.332	.221	.503	.335
25–59....	100	47.89	31.93	1.117	.638	.371	.289	.569	.443
25–64....	100	49.65	32.60	1.177	.667	.402	.357	.622	.553
25–69....	100	50.47	32.79	1.212	.682	.419	.419	.650	.650

* Allowing for advancing attained ages over first 5 years of enrollment.

† 1946–50 Group Life Intercompany Mortality Experience [Graduated by NYLIC], adjusted for advancing attained ages over first 5 years of enrollment.

‡ 1946–49 Select Basic Table, mean of first 5 years of select period for each entry age group.

§ Columns (*a*) represent required enrollment as percentage of eligibles at ages indicated, assuming number eligible and number enrolled are uniform at each age within the range. Columns (*b*) represent required enrollment as percentage of eligibles at all ages below 70, assuming number eligible and number enrolled are uniform at each age within the range.

amounts of insurance at higher ages, such a plan, with evidence of insurability required for all applicants, is generally proposed as a supplement to a basic decreasing term plan.

The table shows that satisfactory underwriting results can be achieved for a decreasing term plan with a lower level of participation that is required to achieve comparable results on a level-amount step-rate plan. In addition, variations in age distribution of the membership and enrollment pattern by age are of less significance for such plans. Since a 30% enrollment of all eligible members below age 60 will generally develop a mortality ratio well below 75% for such plans, it is reasonable to expect that an enrollment requirement for automatic acceptance can actually be attained.

New York Life always secures a health statement from all applicants to professional association plans in order to be able to accept the healthy members and make the plan effective before the enrollment is high enough to justify automatic acceptance. Any automatic acceptance is limited to applicants below a specified age, with the limiting age grading upward as the level of enrollment achieved increases.

For the level amount plans which have a conversion right at terminal age for the full initial amount of insurance, there is a need for a very substantial contingency reserve against selection on such conversions. If the plan includes a wide open conversion right after the individual has been insured for five years, there is a considerable conversion risk in case the plan terminates and particularly if the association should switch to another insurance company in enrolling additional members for the plan at some future date.

New York Life has not yet developed a general method for use of agents to supplement the association's and broker's enrollment efforts, but some experiments have been conducted. It will probably be necessary, generally, to use the agency force to obtain satisfactory enrollments for large association groups, particularly for plans with very high premiums.