EMPLOYEE BENEFIT PLANS

Insurance

A. 1. What procedures, techniques and vehicles are, and may be, used to provide benefits to retired employees for:
   a) life insurance?
   b) medical expenses?
   2. To what extent is prefunding of postretirement benefits practical? What are the advantages and disadvantages of prefunding?

B. Group Insurance Dividends
   1. In establishing and determining dividend formulas, what elements have been considered?
   2. Is interest credited to contingency reserves held by the company?
   3. How do changes in premium taxes affect such formulas and contingency reserves?

C. Major Medical
   1. What has been the recent claim experience under major medical? What are the relative advantages of (*a*) basic first-dollar, hospital and surgical benefits with superimposed major medical and (*b*) replacement of basic first-dollar coverage by major medical? Is there any advantage in incorporating a greater number of "inside limits" in major medical programs?
   2. To what extent can major medical coverage be made available to group under 25 lives?

Atlanta Regional Meeting

MR. CLARENCE H. TOOKEY, speaking on section A, said that the present trend is to continue some group life insurance on retired employees with the amounts usually being substantially reduced. In the Occidental of California the noncontributory insurance is continued in full while the contributory coverage is reduced 30%.

In cases where substantial amounts of group life insurance are continued on retired employees, efforts are made to fund the liability so that no charge is made against the experience on active lives after a retiree's death. A contingency reserve, usually built up from experience refunds, is developed until it is sufficient to provide full funding for existing retired lives as well as for future retirees. Calculations are based upon the 1937 Standard Annuity Mortality Table. The amount for future retirees is obtained by calculating the present value of the reserve that will be required 15 years hence if all persons within 15 years of retirement stay in service until death or retirement. The yearly contribution to the fund is the excess of the present value of the liability assumed 15 years hence over

the amount already in the fund, divided by a 15 year annuity. The reserve is covered by contract with the policyholder and, because such a reserve might otherwise be considered an asset of the policyholder, it is provided that it can never be paid to the policyholder but must be used to pay claims on retired employees. As soon as existing retired lives are funded, all claims on retired lives are charged to the fund.

Mr. Tookey mentioned that there is much greater pressure for continuation of medical expense benefits on retired lives than for continuation of group life coverage, and that quite a few experiments are now being tried in this field. One is to provide for a conversion to an individual medical expense policy on retirement and sometimes the employer will subsidize the conversions.

A few employers extend the same benefits to retired lives that are provided for active lives, although the general practice is to limit medical expense benefits on retired employees either through elimination of major medical features or by putting an aggregate maximum on all claims after retirement.

Mr. Tookey felt that one factor slowing development in this area is the lack of dependable statistics on medical costs above age 65. About five years ago his company extended medical expense benefits to their retired employees and it has developed that the actual cost has been about twice that for active employees. It was pointed out that the retired group is not as high in average age as it will be some years hence. The eventual cost will be influenced to some extent by progress and cost trends in medical practice. The same procedure is being used to fund medical expense benefits as for group life insurance.

MR. GUY L. FAIRBANKS, JR. pointed out the ever-increasing percentage of the group insurance premium dollar being spent on benefits for retired employees and ventured the guarded prediction that twenty years from now, possibly one-third to one-half of the total group insurance premiums will be spent on coverage for retired employees. Mr. Fairbanks believed the two principal reasons why benefits are provided for retired employees are:

1) to combat the argument that group insurance is bad because it is term insurance and ceases to exist when the employee retires and needs it most;
2) that the purpose of a pension plan is to give the employee reasonable security in old age and that this security is seriously diminished if the retired employee has no protection against unpredictable expenses.

Like other speakers, he mentioned that the conversion privilege does not adequately solve the problem and the next step was to continue some

portion of the group coverage. Benefits for retired employees are usually continued on a reduced or limited basis, but the future trend will be to provide coverage for more retired employees and to provide more adequate coverage. This will present a substantial problem in financing and should lead to systematic prefunding. At present, prefunding is not practical under most group plans because no ready means of achieving tax deductibility exists. One prefunding method used by a relatively few employees is to devote employee contributions to the purchase of paid-up life insurance.

Another approach to prefunding came to the attention of practically everyone in the group business a couple of years ago in connection with a number of very large group life cases, all stemming from one very large employer. In these cases, a "special contingency reserve" is to be developed under the contract through the accumulation of all dividends or retroactive rate credits. The growth of this reserve is to be regulated in the future by raising or lowering the rate level. The justification for this reserve is to protect the retired employee against loss of insurance on termination of contract. Its primary purpose, however, is to stabilize long-term cost and thus accomplish prefunding of life insurance for retired employees.

In the medical care area, only a few isolated attempts at prefunding have been made. One method, which is not really prefunding, involves a "merger" of medical care coverage with life insurance coverage. Under this method, the retired employee is given the right to anticipate his life insurance proceeds as he encounters medical care costs which are beyond his ability to pay. While this idea has not yet caught on widely, it should do so in the future because the added cost of expanding a retired employee life insurance program to include medical care benefits is, by this method, rather modest.

The advantages of prefunding retired life group insurance benefits are surely as obvious as the advantages of prefunding pension benefits. The actuarial techniques involved are not seriously difficult and may be developed as a logical extension of existing methods of pension funding.

The prefunding of medical care benefits involves a higher level of prophecy because of the present 5% to 7% annual increase in medical care costs. Prefunding of benefits for retired employees with an assumption that this trend will be permanent could produce some staggering costs. It may be necessary, therefore, to include very restrictive inner limits rather than to attempt any comprehensive reimbursement benefit.

MR. RICHARD H. HOFFMAN stated that his company, the Equitable, has been promoting the continuance of coverage for retired em-

ployees under group policies for many years. He mentioned there are other means, such as conversion from group to individual policies or through the purchase of a single premium policy at retirement for providing postretirement benefits. The relatively high cost of conversions and the inflexibility inherent in single premium methods, particularly when applied to health benefits, were pointed out as hindrances to these two latter methods.

Mr. Hoffman felt that continuance under the group policies is the method with the most flexibility and lowest cost. It was pointed out that postretirement benefits continued under the group policies may be financed on a pay-as-you-go basis or through some funding arrangement. Under the pay-as-you-go approach, the annual cost of the benefits will follow the amounts of benefits received by employees.

Under a funding approach, the employer can discount his future cost by building up a fund out of which would be paid future yearly renewable term costs for retired employees. The advantage of this system is that the cost of postretirement coverage can be charged against present income and that interest can be earned on the fund, which will reduce future annual payments to the fund. Also, employees may feel a greater degree of assurance that the benefits will be continued after retirement. It was pointed out that the tax status of these funds has never been ruled on by the Treasury Department.

The funding approach used by the Equitable is the entry age normal cost method. Only employees who are within 20 years of retirement are considered in determining the amounts to be contributed to the fund. The normal cost and past service liability are checked every three years to recognize changes in the composition of the group. The amounts recommended to be contributed to the fund are set so as to be sufficient to provide, after retirement, the same amount as the premiums required on a pay-as-you-go basis. The dividends allocated to the retired coverage would be returned to the fund. About 20 large size policyholders are using this funding arrangement. All funds are for life insurance coverage, although some groups have expressed an interest in prefunding their health insurance. Interest is guaranteed at the rate of $2\frac{3}{4}\%$ on the funds. No guarantee is made as to the sufficiency of the fund to provide postretirement benefits.

Cost estimates are more predictable for larger groups than for smaller groups since there is a smaller chance of fluctuation. Also, they are more predictable for life coverage than for health coverage.

MR. DON F. FACKLER, discussing section B, stated that the refund or dividend earned for a policy year is the excess of premium earned over

claim charges, expense charges, and an additional charge which should provide for the accumulation of a contingency reserve and assess the cost of groups developing a loss against those which are profitable, as well as contributing an element of profit to the insurance company's over-all operation.

It must be determined at what minimum number of lives or premium income it is desirable that a group be completely pooled and at what minimum level a group should share in surplus distribution—also, whether deficits from previous years' experience should be carried forward.

The major charge against premiums is claims and such charges are represented by the amount of claims incurred during the policy year or some function thereof depending on the extent of pooling. For a sufficiently large group which can be thought of as being beyond chance fluctuation there would be no pooling, resulting in a charge of 100% of the incurred claims. Where the group is quite small its claims may be considered as having zero credibility or complete pooling by ignoring actual claims and substituting expected claims for the class of business. For various sizes of groups between the two extremes there would be a gradual grading from complete pooling to no pooling. However, it is often considered desirable to use full credibility on all A&H coverages except AD&D and, perhaps, polio and major medical.

Expenses are comprised of taxes, commissions, claim and administration expenses. Administration expense and commissions are usually broken down into excess first year amounts and renewal amounts. On larger cases excess first year acquisition charges are frequently amortized over a limited number of years. Another charge, while not an expense, is for life conversions, usually made as a dollar amount per $1,000 of converted insurance.

Since a larger percentage of small groups are unprofitable (due to large chance fluctuations in claim experience) than for large groups, the charge for the cost of insurance on unprofitable groups must be higher as a percentage of premium for the small groups.

The charge for contingency accumulation and profit may be determined by considering the desired contingency accumulation with an eye to specific state laws, competitive situations, and the desired profit. These elements are generally lumped together for practical considerations and in any one year are not considered as distinct operations. With respect to item 2, it is the practice of the Lincoln National to apply what might be called an interest credit to the contingency charge by the device of a reduction in the contingency charge year-by-year.

Premium taxes may be charged on an exact or average basis depending

on the company's philosophy. Since premium taxes are assessed on premiums received, minus any refunds for stock companies, any change in this tax would directly affect the retention of the insurance company. If contingency reserves are obtained from collected premiums and collected premiums are thereby increased, it would be necessary for the insurance company to pay taxes on these funds for that particular year. However, assuming a stock company, if these reserves are returned to the policyholder at a future date as part of an experience rating refund, then the premiums for that particular year would decrease by such amount and the tax would be recovered at that time.

MR. E. EARL WARD, also discussing section B, said that an insurance company's retention for handling a particular group is probably the most important single factor in competitive group selling today, and is determined by the many factors that enter the company's refund formula. A refund formula is based on the premiums earned during the policy year, the claims charged against the group for the policy year, and the expenses of the company in servicing the group for the policy year involved.

During the first year the premiums are usually directly related to the company's manual rates while in renewal years it may be necessary to increase part or all of these first year premiums. Sound renewal underwriting requires that the premiums may be reduced below the prior year's premiums in order to keep to a minimum commissions and other expenses related directly to the premiums paid before adjustment for refunds. However, reducing premiums below prior years' premiums has not been a problem with very many companies in recent years.

The claims charged against a group depend upon the claims paid by the end of the policy year, and claims incurred and unpaid at the end of the policy year.

If the group is large enough, the claims actually paid are charged against the group. If the group is below a specified level related either to premium income, number of lives, or number of life years, then the element of credibility becomes involved. The credibility factor tends to level the claim experience of a group by not charging it with its full claims when it has a higher than expected claim loss. This in effect makes the good groups support the groups with bad claim experience. It appears desirable to assume a credibility factor which based on past experience will not overpenalize the "good business" for the sake of overliberality on groups showing deficits.

The term "incurred and unpaid claims" is usually interpreted to mean the claims paid plus a reserve for claims incurred and reported where there is still a liability outstanding for that claim. An additional reserve must

be established for claims incurred and unreported. The amount of these reserves will depend on the extended benefit provision of the hospital and surgical coverages and the disability provisions of the group life contracts. The current trend seems to be to reduce the extended benefits provided under a group.

The reserve for the claims incurred and unreported can be determined by a review of these claims at the end of the policy year or a factor can be derived from actual past experience which can be applied to actual cash claims or premiums. The reserve to cover claims incurred and unreported must by its very nature be derived from past experience. It is usually derived as a factor which can be applied directly to cash claims or premiums and will vary by the type of coverage involved. These factors will vary by company because of the different extended benefits in each company's group policies and the actual claim experience of the individual companies. Under the current conditions with transferred business being so prevalent, it necessitates the establishing of adequate reserves to cover the required liability in the case where a group terminates.

Practically all group-writing companies carry a special reserve to cover the maternity portion of the extended benefit provision. These reserves vary by company but are usually around 65% to 75% of one year's premium for the maternity benefit.

Another item which is usually included in the claim charge is the cost of converting from the group policy to an individual policy. This conversion charge is to cover the excess mortality or morbidity depending on the type of coverage converted. The amount of the conversion charge is fairly uniform for life insurance, but is extremely varied for the conversion of the hospital and surgical coverages. Some companies make no charge for the hospital and surgical coverage but reserve the right to make a charge in the future if necessary. Other companies make an initial charge of some portion of the annual premium.

These reserves are established separately for each case and represent a definite item in the policyholder's account which is used in determining their refund. Usually the reserve for incurred and unpaid claims, once it is established, is varied only if the premiums or cash claims vary, depending on the method used to establish the reserve.

The insurance company's expenses of underwriting a group are usually broken down into commissions paid, taxes paid, including both state and federal, acquisition expenses and administrative expenses. Commissions are usually charged against the group directly in accordance with how they are paid. In the past the prevailing method was to pay high first

year commissions and low renewal commissions. With competition becoming more keen, it is becoming more and more the accepted practice to pay level commissions. If high first year commissions are paid, it may be necessary from a competitive standpoint to amortize the high first year commissions over a three to five year period.

Taxes are charged against the group policyholder, as they are actually incurred, although some companies determine an average tax rate to be charged on all cases.

The acquisition expenses are those expenses incurred in placing the business. It consists of the compensation of the sales force, advertising, printing, etc.

Administrative expenses are the usual expenses of administering the group. They consist of claim accounting, premium accounting, certificate issuance, renewal underwriting, etc. Wherever possible, expenses directly related to each group are determined and charged against each group. Where expenses cannot be directly assessed, they are determined by an expense analysis and are related to number of employees in the group, type of coverage involved, a per case charge and a percentage of premium charge to cover certain types of overhead, contingency reserves and other margins.

The expenses are incurred in such a nature as to develop higher first year expenses than renewal expenses. Under competitive pressure and because the employer would like to receive a first year refund, it becomes necessary to amortize the excess first year expenses over, say, three to five years. The period of amortization of the excess first year expenses is not uniform among group carriers, and, therefore, the expenses charged against the policyholders in the early years will vary by company. The company that amortizes over a long period of time will show higher first year refunds, but it must somehow compensate for two distinct disadvantages. One disadvantage is that the company will not have received all the expenses it has incurred if the policyholder terminates before the end of the amortization period. Therefore, if this loss is to be recovered, it will require that the expense charge be increased over what would be necessary if there were no amortization of expenses. The second disadvantage is that the company loses interest on the expenses remaining to be amortized during the amortization period.

The company which amortizes its excess first year expenses over a short period of time suffers from a refund comparison during the early years, but eventually is in a very strong competitive position.

Refunds should be as large as is practical when considering the previ-

ous mentioned items. In any event, the company must pay for all its expenses and provide for some reasonable contribution to surplus, if it is to continue its operations.

MR. CHARLES F. B. RICHARDSON said the Mutual of New York in its dividend formula used a conservative approach on credibility. He believed excessive credibility is the bane of the group business and has been for many years. In his company a risk premium approach is used and excess losses are not carried forward from year to year except in the rare case where the loss is so high that proper claim reserves cannot be established. With respect to amortization of excess first year expenses, his company attempts to amortize such expenses over as short a period as practical, and on certain types of cases where the lapse rate is higher than normal a shorter amortization period is employed.

MR. JOHN GORHAM, speaking of Canadian practices, said there seems to be an increasing tendency to operate retentions on group life cases on an accounting type formula for smaller cases. He said it was evident in some instances that a proper charge was not made to cover the risk of claims exceeding an amount which could reasonably be charged against subsequent policy years.

MR. SCHUYLER W. TOMPSON, JR., discussing section C, related the results of studies made at New York Life in connection with supplementary and nonsupplementary major medical experience. The experience was analyzed according to type of plan, area, age and income distribution by means of index numbers consisting of loss ratios to current manual premiums for a particular grouping divided by the corresponding over-all loss ratio. Under nonsupplementary major medical, indications point to higher than expected losses at the younger ages. Under supplementary major medical, losses were higher than expected for medium age and income. Experience outside the New York metropolitan area was favorable while in this area the experience was unfavorable.

A study of individual claims indicated the following: (1) the annual claim frequency for female employees was twice that for males, whereas the frequencies for spouse and child were 150% and 100%, respectively, of the male employee frequency; (2) average claim charges per claimant for female employee, spouse and child were 125%, 100% and about 60%, respectively, of charges for male employees; (3) claims were distributed evenly among five classes—hospital room and board, hospital extra, surgeons' fees, physicians' fees, and other expenses; (4) psychiatric treatment was involved in about 3% of adult claims, with a somewhat lower percentage for children; (5) private rooms were used by 20% of adults confined to a hospital and by 10% of the children.

MR. JOHN M. BRAGG, commenting on section C, reported that the Life of Georgia has underwritten a plan providing life and A&H benefits for employee groups in the 4 to 24 life range since January 1, 1957. The plan contains major medical benefits with a corridor deductible, integrated with a basic hospital-surgical program. It also contains life, AD&D, and optional weekly indemnity benefits.

It was desired that the agent be able to sell and install this program with no assistance from professional group personnel. This made it necessary to simplify the complicated group techniques for calculation of major medical rates. Under the system adopted, four sets of "tables" of package premiums are quoted for the A&H benefits. For each group, a demerit, or "adjustment" is assigned for (*a*) every employee aged 55 or over, (*b*) every employee earning $10,000 or over annually, and (*c*) every female employee. The number of demerits compared with the total number of employees determines the particular table at which the risk is to be quoted.

Mr. Bragg pointed out that the other major problem is that of anti-selection, of particular importance where attractive major medical benefits are included in groups as small as 4 lives. Although evidence of insurability is obtained, the underwriting is done on a semigroup basis. An average numerical rating is calculated for the group, and the effect is such that poor evidence on one employee may cause no effect in a large group, although it may have an effect on a 4 life group. An effort is made to rate a group by one or more tables rather than to reject a particular life altogether.

Sales on this plan, although slow at first, have been gratifying within the last six months. Although purchase of major medical is not compulsory, 60% of the cases buying basic hospital and surgical benefits buy major medical also.

The experience under this program appears to have been satisfactory to date. The paid loss ratio under the major medical coverage was 31.3% during the first 28 month period. On an incurred basis, the major medical loss ratio for the same period was about 55% to 60%.

San Francisco Regional Meeting

MR. MYLES L. GROVER, in leading off the discussion of prefunding insurance for retired employees, said that the tremendous increase in the number of participants in formal retirement plans in recent years and the activities of unions have caused a recent growth of interest in prefunding of group insurance for retired employees. Where no prefunding was present, but term insurance premiums were paid for such coverage from year to year, he stated that the employee would have no guarantee of benefits,

and the charging of these costs to the employee's period of production could not be done. Prefunding would also be advantageous since it would tend to level out the cost of providing group coverage for pensioners. He contrasted this to a situation where dividends in excess of employee contributions on active coverages have been returned to employees in some instances even though costs to the employer were bound to rise later as the high costs of continuing retired coverage mounted. Mr. Grover next traced the effects of taxation on prefunding. He stated that it is a general belief that any irrevocable contributions made by an employer to an employee benefit plan, whether they vest immediately in the employees or not, would be deductible as a business expense. Referring to Mimeograph 6477 issued by the Bureau of Internal Revenue, he said that plans where only employee contributions purchased the paid-up life insurance have been encouraged, along with other permanent plans where the employees' insurance coverage would be forfeitable, since the employer contributions to nonforfeitable future benefits would be taxable income to the employee in the year of contributions. Mr. Grover believed that the day would come when most group insurance coverage for pensioners will be fully funded.

MR. PAUL H. JACKSON stated that the Aetna has approximately 1,500 group paid-up life plans in force. These are handled in a separate department at an expense which is comparable to that for regular group insurance. Mr. Jackson stated that employees like group paid-up even though their contributions for such permanent insurance are sometimes double what they would be for term insurance for the same current protection. In addition, the group paid-up approach, with employees paying for the permanent insurance, has the clear tax advantages mentioned by the previous speaker. His company has also written some group permanent, usually life paid-up at age 65, or single premium at retirement by adding a simple amendment to the group policy. No changes are made to the active coverage or certificates and coverage remains forfeitable before and after the premium paying period. Most of this type of business is now handled on short method administration with the employer reporting once a year or as employees retire. The actuarial reserve is computed by his company annually. When required by the terms of a labor agreement his company has also used the deposit fund approach where term insurance costs are withdrawn as needed for retired coverage, and deposits are determined actuarially. Experience refunds can also be added to the deposit fund or used to reduce current deposits. Mr. Jackson cited as another reason for prefunding the fact that the presence of a prefunding

reserve made it more difficult for the coverage to be transferred to another carrier.

MR. VINCENT GRAINGER thought that the discussion of coverage for retired employees should not be closed without mentioning that the conversion privilege required for life insurance and commonly used with medical care insurance is a practical method of getting the job done.

MR. WILLIAM DAVID SMITH commented that the actuary can probably do a fair job of predicting the kind and amount of medical services to be required by a group, but that the costs of these services seem not subject to reliable prediction. The prefunding of a fixed benefit plan may, if inflation takes its toll, leave the pensioner with the feeling that prefunding has not done much for him. The problem is similar to that of prefunding for cost-of-living pensions. In fact, there is some question whether this particular expense of retired employees should be funded separately from the pension plan. If equity investments prove satisfactory for pension benefits, perhaps a similar vehicle will be used for medical expense benefits either funded separately or as part of the pension plan. In considering the advantages of prefunding, lower cost is often quoted as an advantage. However, funds used for prefunding might be put to better use by management in their own business. Because of this Mr. Smith thinks it is difficult to say whether actual costs are increased or decreased by prefunding.

MR. DAVID G. GODDARD suggested the use of a supplemental pension under a qualified plan allocated to pay the annual cost for retired life coverage. Such a method could be amended from time to time but would seem to create further problems.

DR. ALAN A. GROTH said he believed that the group paid-up life method described by the first two speakers actually leaves the employee with less take home pay, because of income tax consequences, than if the employer were to pay less salary but provide postretirement death benefits through a qualified plan.

MR. RICHARD D. BALDWIN's company's experience on group paid-up life differed from Mr. Jackson's, since the expense rate in the Sun Life has been higher than for group term, possibly because of the smaller volume they handled. In Canada, the Department of National Revenue wants to be sure that the employer contribution to permanent insurance is on a level premium basis and is irrevocable. Paid-up insurance at retirement is not taxable to employees in Canada, according to Mr. Baldwin's understanding.

MR. JOHN K. DYER, JR. said that an employer should be given

some idea of the cost of group life for retired employees. One method he has found valuable is to compare the values at retirement of prospective life insurance and pension benefits. For example, if the amount of pensioner life insurance averages three times the annual pension, its value at retirement is about twice the annual pension. Comparison of this with the value of the pension itself of about twelve times the annual amount indicates that the postretirement life insurance commitment has an inherent cost of about one-sixth of the pension commitment.

MR. EUGENE H. NEUSCHWANDER commented that in his opinion the needs of retired employees which should be recognized by an employer are the burial costs of the retired employee and the needs of the widow. A $2,000 paid-up life benefit might take care of the first need, and an automatic joint and survivor payment arrangement (without reduction in pension) in the pension plan could take care of the second, thus solving the whole problem without a tax complication.

MR. WILLIAM CUNNINGHAM wished to caution actuaries on the use of active group life mortality tables in predicting costs for retired employees. Retired experience will be different, since group experience is based on exposure of employees actively at work.

MR. MAURICE H. FARRANT referred the group to the fact that modest death benefits can be provided under qualified pension plans with all contributions deductible whether prefunded or not. Also Section 101 of the Internal Revenue Code would permit the exemption from personal income tax of the first $5,000 of death benefits so provided.

With reference to section B, MISS JOSEPHINE W. BEERS remarked that there probably were few differences in actual practice between experience rating refunds and dividends.

She reviewed the elements which actuaries would include in their calculation formula, making sure that factors could be determined without more clerical work than results would justify, and making reasonable estimates of other factors. She also commented that the relative sales value of the different methods of amortizing first year expenses, charging for premium taxes, and crediting interest, may determine the most appropriate handling of these items in the experience rating formula. Regardless of the details included in the final formula, Miss Beers stated that it should be designed to achieve five basic objectives:

(1) that the aggregate expense charges will be sufficient to cover the aggregate expenses;
(2) that the company will be adequately protected against claims fluctuations, whether by pooling risks or by maintaining fluctuation reserves, or both;

(3) that the company may anticipate a reasonable profit from its group business;
(4) that the refunds paid out will be proportionate, as far as is practicable, to the surplus arising from the various policies; and
(5) that the resulting net cost under the various policies will be in line with competition.

Miss Beers commented that, in her opinion, the industry tends to underestimate the risk of claims fluctuations. It is her belief that, if all companies would give more emphasis to the sharing of risks, companies would lose fewer cases to competition in the year when claims were high and could more confidently anticipate a more reasonable profit from group insurance.

MR. GRAINGER, referring to the same subject, said that the dividend formula in use by any particular company is the result of several years of gradual development. As technical knowledge increases and the nature of business becomes more complicated, the formula tends to become more complex, taking into consideration the over-all effect on the company and the effect on individual policyholders. Mr. Grainger stated that most formulas now have at least the following elements: manual premiums, paid premiums, paid claims, claim reserves, federal taxes and state premium taxes, commissions, administrative expenses and risk charges. He further stated that consideration of how and when the general sales expenses are charged off is necessary, including the expenses for cases not sold. In Mr. Grainger's opinion, the risk charge should be set up as a function of the benefit provided, the maximum individual claim potential, the margin between paid premiums and the sum of claims plus other retention items, the number of lives and the previous experience of the group. In addition, he stated that provision must be made for the recoupment of prior year losses when they occur.

MR. WILLIAM CUNNINGHAM said that the Pacific Mutual had never written Comprehensive without the use of inside limits. He intended to discuss only the advantages of inside limits. It was his feeling that an open end plan discriminated against the conscientious majority who did not abuse the benefits.

The medical profession has based charges on ability to pay, but such charges may be based on insurance benefits available. Inside limits may result in insured employees paying less than 20% coinsurance.

He said that inside limits made rate increases, due to rising cost, easier to sell because the increased limits went along with the increased premiums. Policyholders (employers) preferred inside limits if they were

properly explained. From the agents' point of view, the inside limits seemed a little more difficult to sell but reduced the problems at renewal. Hospitals and doctors preferred definite limits because of difficulties over "unreasonable" charges when there were no properly defined criteria.

He continued that it was important for the insurance company to keep constantly in mind the four principles of sound insurance:

1. The loss insured against should be of infrequent occurrence.
2. The loss insured against should be of financial consequence.
3. The loss insured against must be beyond the control of the insured or any third party.
4. The loss must be of an amount which is definite when the contingency insured against happens.

It was Mr. Cunningham's conclusion that major medical without inside limits violated all four principles and that, while inside limits might pay too little in the few unusual claims, the advantages of it outweighed the disadvantages.

Referring to question 2, he stated that a study of small cases indicated a loss ratio at least 15% higher than for larger cases. This appeared to be because of selection by the policyholder and because the industry was accepting transfers at standard rates even though many of the cases were substandard.

He suggested that for smaller cases there should be lower maximums and reduction after the age of sixty-five.

MR. ALEXANDER MARSHALL said one of their actuarial students, Larry Mitchell, had prepared a table based on data submitted for the intercompany morbidity study to show the effect of varying deductibles. Assuming a $50.00 calendar year deductible was 100%, this study indicated the relative values of $0.00, $25.00, $75.00, $100.00, $150.00, and $200.00 deductibles. They felt the $0.00 and $25.00 figures were unreliable because it was not known how many claims were unreported. For male employees the range was from 119% for $0.00 deductible to 66% for $200.00, female employees from 123% to 69%, wives from 115% to 67%, and children from 136% to 43%.

The study also attempted to get a pattern of annual claims costs by age groups, but the exposure was too small to give meaningful results.

The figures were not published but might be useful for comparative purposes for anyone trying to develop similar studies.

Mr. Marshall said that, in his opinion, major medical superimposed over basic was more easily understood by employees because they got something back for their money, but comprehensive was better insurance.

MR. GRAINGER said that Los Angeles experience was poor, San

Francisco was getting worse, and the Colorado area seemed to be getting worse. The Northwest was still pretty good. Superimposed was much better than the other, perhaps because the rate structure was better.

He thought that the most trouble developed in those areas of rapid growth such as Los Angeles. But one of the primary sources of trouble was the original rate structure. He thought the Society study would be of great help.

He thought twenty-five life groups could be written if proper controls were put in, but the persistency had been horrible.

MR. WILLIAM A. HALVORSON said that he thought comprehensives would grow. There would be more adequate premium rates, contracts would be clearer to employees, and the public would be able to buy what it wanted for a price.

MR. GEORGE N. WATSON stated that inner limits such as suggested by Mr. Cunningham meant that the coverage was no longer major medical, but if inner limits of some kind were not enforced, the plan would die a natural death. He said that the Crown Life had developed a definition of "unreasonable" expense, which was not covered, as being anything in excess of a relative value schedule unless the insured could submit proof that the charge was reasonable. He thought this would allow them to take care of the unusual legitimate expenses in exceptional cases without exposing them to excessive charges in ordinary cases. He felt that this plan would discourage the claimant who might otherwise be inclined to abuse the plan, because it would be difficult for the claimant to bring proof that a charge was reasonable if, in fact, it was excessive.

He added that on small cases down to twenty-five lives, they allow experience rating credits annually, but on smaller ones they experience-rate only at two-year intervals.

MR. NEUSCHWANDER stated that the major medical plan covering their own staff, about 6,000 nationwide, had developed steadily rising claim rates. Management had made a general study of the personnel situation and had dispensed with the services of 150 people over a two week period because of abuse of the medical plan, work output, and general attitude. Following this, there was a noticeable improvement in the loss ratio. The first four months of 1959 were about 20% under the first four months of 1958, where the normal would have been a 6% increase.

MR. DYER, talking from the viewpoint of the consulting actuary, suggested that it was important for the insurance companies to get back into the insurance business. Particularly in the case of large employers the element of insurance was disappearing.