## EMPLOYEE BENEFIT PLANS

Group Statements and Accounting

- A. Are periodic statements suitable for measurement of group term and accident and health financial operations, or does the effect of fluctuations and seasonal variations tend to distort such measurement?
- B. What methods are in use to arrive at group accident and health claim reserves in respect to aggregate company liability and individual case analysis? What practices of claim dating are employed? What provision is made for different coverages, types of benefits, maximums, seasonal variations, etc.?

## Jacksonville Regional Meeting

MR. GORDON R. TRAPNELL: At the Life of Virginia, we furnish a statement at the end of each month and we are questioned rather closely when the loss ratios are high. However, I feel that a monthly report is not significant and that one should not be questioned on the level of loss ratio on the basis of one month's experience. Rather, I feel that quarterly or semiannual reports would be more significant and more accurate.

MR. TED L. DUNN: I would like to express my agreement with what Mr. Trapnell said about the significance of monthly statements. One thing which should be kept in mind in trying to interpret them is the number of working days in the month, since this alone can influence the amount of claims paid even though premiums will normally run along about the same.

At Provident Life we have noticed a significant increase in the claim lag on medical care coverage and this was so extreme that we increased our reserve factor on basic medical care coverages by 20 percent. The only explanation for this increase in claim lag that seemed reasonable to us was that the paperwork in doctors' offices and hospital offices has increased to the extent that it just takes longer for them to process the papers and get them in to us.

MR. THEODORE J. KOWALCHUK: I feel that the usefulness of periodic statements depends on the size of the company—for example, in a small company one quarter's experience cannot be too meaningful.

Turning to section B, at the U.S. Life we generally arrive at group health claim reserves for individual cases by applying a factor to the amount of premiums earned in the preceding three months. Alternatively, we arrive at the reserve for an individual case by taking the tabulation provided by our IBM machine program of the total amount of claims paid for that group in the current calendar year which were incurred in the previous year and increasing this figure to allow for those which may still be unpaid or unreported. If the reserve estimate based on premiums

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appears to be too low we use the reserve figure based on the group's own claim experience.

Aggregate company group health claim reserves are computed quarterly by our data processing equipment by the application of factors to the premiums earned in the last three months. Separate factors are used for weekly indemnity, basic health coverages, comprehensive major medical and supplementary major medical. In arriving at our aggregate reserve total we adjust the reserves produced on the machines for each of some 50 large groups if their own claims experience indicates an adjustment is appropriate.

We are considering applying an adjustment to reflect seasonal variations in claims but have not yet arrived at appropriate factors.

MR. CARLTON HARKER: At the Coastal States Life we determine our claim reserves by a method which we have developed ourselves. First we list the amount paid claims for each of the last twelve months by the month in which they were incurred. In the listing we exclude those claims which were incurred prior to the beginning of the twelve month period. This listing yields a triangular array consisting of 78 amounts—12 for the last month, 11 for the second last and so on down to only 1 for the first month.

We then extend the triangle into a parallelogram with the 78 amounts in the added triangle having the same relationship to each other as their counterparts in the original triangle. The extension is done first by assuming that the relationship of the items is arithmetic and then is repeated assuming that the relationship is geometric.

The sum of the 78 items in the added triangle is the total claim reserve and in practice we choose an amount which lies between the sum of the 78 items done arithmetically and the sum of the items done geometrically.

From the total reserve arrived at in this manner we deduct the amount of due and unpaid claims as determined by inventory at the year end and also the amount of claims in course of settlement, and what we have left is the reserve for incurred and unreported claims.

MR. ERWIN A. RODE: On section A, other than for the annual statement covering group insurance in total, we, at the Prudential, make no periodic statements of the compete financial operation of our group life and accident and health business. We feel that the difficulties involved in producing sufficiently accurate figures are too great, considering the value of them, for statements covering less than a year. One major difficulty, of course, is an estimate of the accrual of the dividends during the periods involved. However, we do make some use of premium and claim data for

shorter periods as an aid in predicting and projecting our annual figures. For them, it is essential, where the business contains very large as well as small groups, or annual premium cases, that the true, earned premium for the period be obtained. Generally, an adjustment to an incurred basis can more readily be made for claim figures, which considers the lag between the incurred and payment date and any change in the level of in-force. Use of a moving 12 months period for claims will automatically remove the effect of seasonal fluctuations.

On section B, our group health insurance claim liability for the annual statement is based on a reconciliation of the liability of a previous year. Each claim payment is coded to show the incurral date. For this purpose the date of incurral of a weekly income claim is the date of disability; the date of incurral of a medical expense is: for a hospital expense the date entered the hospital, for a surgical expense the date the operation was performed, and for a major medical expense the date the medical service was rendered or the purchase made. In the case of a payment covering expenses incurred on various dates, which is most common under a major medical coverage, the date of incurral is based on the incurral date of the largest portion of the expenses.

The reconciled liability for the previous December 31 consists of each claim payment during the current calendar year under which the incurral date was in the previous calendar year. This reconciled liability is related to the claims paid during the fourth quarter of the previous calendar year and the resulting factor applied to fourth quarter claims of the current year. Factors are calculated separately for each coverage and for employees and dependents. Adjustments are sometimes made for any unusual trends in levels of claims or payment lags. However, no adjustment is needed for seasonal fluctuations. The resulting liability is split for Exhibit 9 of the annual statement into: Part 1, Line 3, Present Value of Amounts Not Yet Due on Claims; Part 2, Line 2, In Course of Settlement; and Line 3, Incurred but Unreported. This split is based on a more detailed study of the reconciled claim liability conducted periodically.

An additional liability under our medical expense coverages is calculated for Exhibit 9, Part 1, Line 4, Reserve for Future Contingent Benefits (deferred maternity and other similar benefits), to cover the extension provisions in the policy: the regular extension, generally covering a period of 3 months of disability after termination of insurance, or to the end of the second calendar year following termination in the case of major medical, and where applicable the maternity extension, covering claims during the nine months following termination of insurance. Factors for this liability are based on special periodic studies of samples of claims

which consider any period of continuous disability prior to the incurral of the medical expense on which the benefit is based.

As regards individual cases, a claim liability is determined in connection with each case dividend calculation. This liability we consider dependent upon two factors: the level of claims and the lag in reporting and accounting for claims, including provision for the extension liabilities. For a case of sufficient size, the level of claims is based on the case experience; for smaller cases the level is based on company averages. In general, the lag is based on company experience, considering the coverages involved, whether or not maternity is included, and, to some extent, the plan of benefits—for example, the benefit period for the weekly income coverage and the deductible for a major medical coverage. The Company average lag factors are based on average lag experience over the entire year.

## Chicago Regional Meeting

MR. DONALD D. CODY: At the New York Life we have used quarterly statements for several years and have found them valuable even though they do have many shortcomings. We operate our group department on a fiscal blueprint and have found that the best way of reviewing the actuarial data that lie behind our profit and loss is by the use of these statements. Our data are presented in five basic exhibits with an attached analysis of the results. Each report shows nine quarters with the last four remaining active. Results are presented on a quarterly basis, on a year-to-date basis, and on a 12-month cumulative basis.

The first exhibit is in the form of a typical gain and loss exhibit covering our regular group operations, life and A & H combined. Premiums and investment income data are obtained easily from our accounting. To increase the accuracy of our claim estimates, this report is brought out two months after the end of each quarter. Dividends are estimated by working back from a total return ratio which is based on claims plus dividends and follows seasonal patterns. Expenses, taxes and commissions are developed from our budgets and by reference to the activity in our operation.

The second exhibit is similar to the first except that it covers our small group operations, that is, less than 25 lives.

The third exhibit is aimed at the lapse rate. We take the in-force at the beginning of the quarter and at the beginning of the 12-month period ending in the current quarter and follow it through issues, changes, lapses, and changes and corrections to in-force at the end of the current quarter. Results are shown by policies, premiums, and size of case. This exhibit provides a valuable check on our renewal underwriting procedures, for if we find our lapses are at a point where we are mortgaging our future

to establish a more attractive current fiscal condition, it is sensible to adjust our renewal underwriting to some extent.

The fourth exhibit consists of graphs showing loss ratios on regular and small groups by life and health insurance.

The fifth exhibit is a report on renewal underwriting action with most of the emphasis on cases under 100 lives. We have found that with sensible renewal underwriting procedures on our large cases not too many carriers are willing to take more risk than we are willing to take. We have to pay special attention to the small case business because here renewal underwriting formulation is more of an artistic procedure than a scientific one. By comparing the increases in premium required to keep ahead of the trend in medical care costs through such an exhibit as this, we have another key to a proper underwriting philosophy.

It is true that these exhibits include many estimates; however, I cannot see any other way of running a group operation intelligently. It is important to put at the bottom of each table proper representation as to the extent of the approximations so that top management does not go through a cycle of optimism and pessimism.

MR. LARRY T. STEELE: At the Continental Assurance we have a method of estimating claim reserves that is different from most companies. We use two different dates for getting incurred claims. One date we call the date service incurred, which is really the date the person goes to the hospital, has the surgical operation, etc. The other date we call the date last worked.

Our aggregate reserve is obtained in two pieces. One piece is called the lag reserve and is based on the difference between the paid date and the date service incurred. The other piece is called the extension of benefits reserve and is based on the difference between the date last worked and the date service incurred. For this later reserve we get a factor for employees and use the same factor for dependents. These figures are then related to premium and the whole aggregate company reserve is based on the annualized premium in force for the company.

This means that the full reserve is included for new groups, and no reserve is included for groups that have terminated. We believe that this reserve is conservative for a growing company.

MR. RICHARD S. MILLER: Simple cash flow monthly reports were started at the American United about five years ago. These were surprisingly good for projecting annual statement results. However, about two years ago we switched to more refined reports as we started getting

enough large case business to cause some violent fluctuations in incurred claims.

In the new report our claims are reported by amount paid less a reserve released. The reserve released is a credibility factor times the claim amount, up to a limiting total for the policy year. The credibility factor and limiting amount are computed at issue or renewal. As an example, for cases with a 100 percent credibility, we have a zero actual cost through this period until claims reach a limiting amount. By the use of a dividend reserve released factor in our claim accounting, we have been able to develop a claim and dividend reserve factor for any period which is relatively accurate and dependable as a projection of year-end figures.

We have also found a violent seasonal fluctuation which we now incorporate in the summary for the evaluation of monthly and quarterly reports.

A report on actual to expected claims on all recent issues is also prepared which provides data on the trend and accuracy of our claim rates. This is referred to the underwriter for his inspection and gives him a good check on his educated guesses.

MR. ROBERT C. NUDING: The Aetna Life has been producing monthly statements of underwriting results for group accident and health for a number of years. In recent years, much attention has been given to searches for methods of reserve calculations which would reduce undue fluctuations in results from month to month. However, it is obvious from a review of the incurred claims by month, for any year in retrospect, that there are substantial true fluctuations. Some years ago, we introduced a "seasonal" factor into our claim reserve calculations which has been helpful but which has not completely prevented inaccuracies in our month-to-month reserves. We believe that the month-to-month variations in number of banking days and in true seasonal variations, combined with the inherent small errors in using average reserve factors, are affecting our monthly statements in such a manner that the results we obtain may not completely justify the expense incurred.

One method we have found useful in dampening severe changes in the theoretical monthly profit has been the use of a mathematical formula which provides an increment to or a decrement from the reserve for experience refunds, and which is based on the relationship between profit (or loss) and net earned premiums.

To summarize, it seems to us that quarterly statements would produce as good results as monthly statements and would reduce expenses somewhat.