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GROUP LONG-TERM DISABILITY

Moderator: KURT K. VON SCHILLING. Panelists: PAUL R. FLEISCHACKER, DAVID S. WILLIAMS, MARTIN STAEHLIN

1. Trends in termination and frequency rates in the U.S. and Canada

2. U.S. and Canadian view of underwriting and product costs in anticipation of a recession

3. Human rights as it affects the design of Long Term Disability benefits at present and in the future from the Canadian viewpoint

4. U.S. scene regarding anti-selection on pregnancy benefits

5. Benefit design in response to the Age Discrimination in Employment Act

MR. KURT K. VON SCHILLING: A decade ago, in the late sixties and early seventies, Group Long Term Disability was always discussed in the light of the large financial losses incurred due to the severe depression of the aero-space industry. Now, a decade later, we may be talking about the effects of the auto industry. The most important question for us is: Have we learned from the experience of a decade ago? The current experience is just unfolding and no judgement can be passed.

The history of mankind has many examples that history repeats itself and mankind seldom learns its lesson. During the discussion segment of our concurrent session, or during the workshops tomorrow morning, we will have an opportunity to exchange opinions and to ascertain whether we have learned our lessons of a decade ago and, hence, are able to master the severe depression in the auto industry and its ripple effects without severe financial losses in the Long Term Disability line.

This afternoon, we have gathered a knowledgeable panel of experts who will present comments on benefit design, response to age discrimination, pregnancy benefits, and the human rights question. We will also hear presentations with respect to trends in termination and incidence rates in the United States and Canada and how, as an active underwriter in the current marketplace, we can price for future recessions. The speakers will raise a number of questions and we look forward to a lively discussion following the formal presentations.

MR. PAUL R. FLEISCHACKER: In 1978, two major amendments were passed by Congress and signed into law:

1. An amendment to Title VII of the Civil Rights Act of 1964 known as the Pregnancy Discrimination Act, Public Law 95-555.

2. An amendment to the Age Discrimination in Employment Act of 1967.

Both amendments have had considerable impact on employee benefit plans--in terms of both cost and plan design. I will discuss their impact on Long Term Disability Plans.

Pregnancy Discrimination Act

First, I will discuss the Pregnancy Discrimination Act. A little history might be useful. The 1964 Civil Rights Act prohibited discrimination in employment practices for many reasons, including the sex of the employee.

To the great surprise of most observers, the Supreme Court ruled in 1976 that General Electric's practice of excluding disability coverage for pregnancy was not discriminatory. In 1972, the Equal Employment Opportunity Commission (EEOC) had passed regulations prohibiting the practice and the Supreme Court frequently relies heavily on administrative agency guidelines as precedent in its decision.

In the wake of this decision came a proliferation of state laws and court rulings. Simultaneous with the action on the state front was activity in the Senate and the House. Finally, in October, 1978, the House and the Senate agreed on a compromise bill and, on October 31, 1978, President Carter signed this bill into law, to be effective immediately, except for an April 29, 1979, date for benefit programs. On April 20, 1979, the EEOC issued its interpretations of the Pregnancy Discrimination Act in the form of a series of questions and answers.

What does this Amendment do? In a nutshell, the Amendment expands the definition of sex discrimination in the Civil Rights Act to prohibit discrimination on the basis of "pregnancy, childbirth, or related medical conditions". The Act requires employers of more than 15 **persons to treat** pregnancy, childbirth, and related medical conditions including abortions the same as other causes of disability under benefit plans.

In the EEOC's interpretations of the Act, Question and Answer 16 deals specifically with Long Term Disability:

> Q. Must an employer who provides benefits for long term or permanent disabilities provide such benefits for pregnancy-related conditions?
>
> A. Yes. Benefits for long term or permanent disabilities resulting from pregnancy-related conditions must be provided to the same extent that such benefits are provided for other conditions which result in long term or permanent disability.

What has been the effect of this Act on Long Term Disability rates? To answer this question, I reviewed the group manual rating structure and procedure for eight major insurance companies. Three of the eight companies did not show separate rates for pregnancy coverage. They either are not charging any additional premium for the coverage or have not updated their group manuals with the revised rates.

Of the remaining five companies, four showed rate adjustments for changing from no pregnancy coverage to full coverage and two (including one of the four) showed rate adjustments for changing from coverage of complications of pregnancy to full coverage.

These adjustments varied considerably in size. For example, for issue ages less than 30, the approximate percentage increase in the female rates ranged

as follows:

Pregnancy Coverage	3 Months Elimination Period Range
None to Full	47% to 304%
Complications Only to Full	34% to 97%

Pregnancy Coverage	6 Months Elimination Period Range
None to Full	19% to 116%
Complications Only to Full	6% to 7%

The percentage increases for other issue age brackets were similarly inconsistent.

For client assignments, if the client does not have the necessary data, we use public sources, such as the Monthly Vital Statistics Reports published by the Department of Health and Human Services, for frequency rates. We adjust these rates for the percentage of pregnancies expected to complete the elimination period. For plans with a short elimination period, such as three months, we assume a fairly high percentage will complete the waiting period. For plans with a six month or longer elimination period, only pregnancies with complications should complete the waiting period, and, thus, we assume a much smaller percentage.

From discussions that I have had with several companies, the average claim appears to be very small--probably less than two months payments.

What about anti-selection? On all plans, anti-selection could occur in the following areas:

1. The insured "becomes disabled" earlier in her pregnancy than medically necessary, or

2. The insured remains on a disabled status longer than medically necessary, or

3. Both of the above.

Also, under contributory plans, female employees contemplating future pregnancy are likely to enroll in the Long Term Disability plan.

Detecting and measuring anti-selection on pregnancy disability claims is very difficult. How much time and expense will or should a company incur for a relatively small claim? Will a company require any additional evidence other than a doctor's statement that the insured is pregnant and should not work? Or that the insured should not return to work for six to eight weeks after delivery?

Based on my discussions with several insurers, such anti-selection has not yet been apparent. In fact, the experience has been excellent. Most companies took a very conservative approach in pricing this coverage, and the limited experience to date indicates that actual claims have been considerably less than expected.

Age Discrimination in Employment Act

In 1967, Congress responded to charges of widespread discrimination based on age by passing the Age Discrimination in Employment Act (ADEA). The purpose of the Act was "to promote employment of older persons based on their ability rather than age; to prohibit arbitrary age discrimination in employment; to help employers and workers find ways of meeting problems arising from the impact of age on employment". The Act protected employees, age 40 through 64, of an employer with 20 or more employees. It prohibited discrimination in hiring, firing, compensating, granting of privileges and conditions of employment. Section 4(f)(2) of the Act included an exemption from compliance for any bona fide employee benefit plan which is not a subterfuge to evade the purpose of the Act.

In the latter part of March, 1978, Congress amended ADEA. President Carter signed the bill on April 6. The law became effective on January 1, 1979, for most organizations.

The 1978 amendments had two major changes which affect benefit plans:

1. The protected age bracket was increased from age 64 to age 69. In effect, then, the earliest possible mandatory retirement age for most employees has become age 70.

2. Section 4(f)(2) mentioned above was amended by the addition of the clause "...and no such employee benefit plan shall require or permit involuntary retirement...because of the age of such individual". This effectively overturned the McMann vs. United Airlines decision in which the Supreme Court ruled that, because of the Section 4(f)(2) exemption, involuntary early retirements could be required.

It is important to note that, with the above exception, the Section 4(f)(2) exemption for bona fide employee benefit plans was left unchanged by the 1978 amendments. What a surprise then when, on September 22, 1978, the Department of Labor issued its proposed interpretation on permissable benefit practices under ADEA. The basis for the Labor Department's proposal was that benefit plan provisions which discriminate because of age can "force" retirements and, therefore, are not permissable. In taking this position, the Department of Labor relied upon the amended Section 4(f)(2).

The final Interpretive Bulletin (IB) was published and made effective on May 25, 1979. Only minor changes were made in the proposed bulletin. What effect does the IB have on benefit plans and particularly on Long Term Disability plans?

In the past, many welfare plans discriminated by cutting back the benefits after an employee reaches a certain age. Now such reductions are permitted only on a cost-justified basis.

There are three principles which must be considered to determine if the welfare plans comply with the IB:

1. Benefit cutbacks based upon age must be justified by increased costs for older employees. This has the important ramification that complete removal of coverage is not cost-justifiable.

   The types of cost data that may be used to justify benefit reductions for older employees are:

   (a) Employer's own costs determined over a representative period of years, or

   (b) Cost data for a larger group of similarly situated employees but not if the employer's own rates are significantly less than those for the larger group, or

   (c) Reasonable projections where reliable cost information is not presently available, for example, on post-age 65 disability incidence.

2. On contributory plans, an employer may not require, as a condition of employment, older employees to join a plan to which they must make greater contributions than younger employees.

   If a benefit plan is "voluntary", older employees may be required to make greater contributions than younger employees. However, the proportional cost paid by older workers cannot be greater than that paid by younger ones.

3. As a general rule, the Department of Labor has taken the position that cost justified reductions are limited to a benefit-by-benefit basis.

   However, the final IB does permit a "benefit package" approach under which some benefits may be reduced more than would be cost justified provided the savings are applied to the purchase of other benefits for the same employees.

   The use of the "benefit package" approach is subject to two major limitations:

   (a) Pension benefits must be excluded.

   (b) The approach cannot be used to justify larger decreases in medical benefit coverage than would otherwise be permitted.

   Regrettably, with these restrictions it appears that the "benefit package" approach is limited to Group Life insurance and disability income benefits.

For Long Term Disability benefits the IB addresses two related issues: the level of benefits payable to employees who become disabled before age 70 and the duration of these benefits. The Labor Department will allow

Long Term Disability plans these choices:

1. Long Term Disability (LTD) payments may cease at age 65 if an employee becomes disabled at or before age 60. If disability occurs after age 60, LTD payments may cease after five years or attained age 70, whichever occurs earlier. Full benefits are payable. The Department has formally approved this approach in the IB.

2. LTD coverage and payments will continue to age 70 but the level of benefits can be reduced for older employees. This, of course, must be cost justified.

3. The benefit level remains constant but the benefit period varies with age. This, in effect, is a variation of the first approach but must be cost justified.

   The IB included the following schedule as an example of the reduced benefit period approach:

Age at Disablement	Benefit Period (In Years)
61 or younger	To Age 65
62	3 1/2
63	3
64	2 1/2
65	2
66	1 3/4
67	1 1/2
68	1 1/4
69	1

   An employer can use this schedule if it is cost-justified in accordance with the IB's provisions.

To further complicate attempts to comply with ADEA, as of July 1, 1979, responsibility for administration and enforcement of the Act switched from the Department of Labor to the Equal Employment Opportunity Commission (EEOC). The EEOC is considering some changes to the IB. As of now, the only change being considered that could affect the LTD plans and their design is that the EEOC may permit pension and other retirement plans to be included in the "benefit package" approach.

What plan designs are being adopted by employers? According to our benefit consultants, it appears that most employers are re-designing their benefit plans using the benefit-by-benefit approach. In addition, for LTD plans, there seems to be a preference emerging for adjusting the benefit period (Choices 1 and 3 discussed previously) at the higher ages as opposed to reducing benefits and continuing them to age 70. **Among the reasons for this are:**

1. The fear that the age 70 ADEA limit may be removed by future congressional action.

2. A desire to put the employee on the pension rolls at the earliest possible date.

3. Avoidance of appearing to discriminate against older employees which could result with the reduced benefit formula approach.

In the latter part of 1979, TPF&C's Employee Benefit Information Center conducted a survey of eight large organizations regarding compliance with the amended ADEA. One of the eight companies was still assessing its LTD plan. The other seven all opted to reduce the period of LTD benefits for older workers; four chose the design which is effectively pre-approved by the Labor Department (Choice 1) and three preferred other schedules (Choice 3).

Surprisingly, very few companies appear to be using the "benefit package" approach. And yet this may be one of the most cost effective ways of complying with ADEA! One study which I saw and which was conducted by one of our benefit consultants did utilize this approach. The welfare plans consisted of Group Life insurance, survivor income benefits and LTD. On a benefit-by-benefit approach, only the survivor income benefit complied with the Act. However, on a combined basis, all three complied because the combined costs increased by age. As employers become more familiar with the Act, the IB, and the potential cost advantages of this method, we believe that more and more companies will utilize this approach in evaluating their welfare plans--and particularly if the EEOC decides to permit pension plans to be included in the "benefit package" approach.

What's on the horizon for ADEA? As implied earlier, the upper age limit may be removed. This is already the case in the ADEA laws and regulations of several states. In fact, early in 1979, a bill was introduced which would have added to Title VII of The Civil Rights Act of 1964 a prohibition against discrimination affecting persons age 40 and over. If passed, ADEA would have been repealed. The amendment would have had the effect of:

1. Eliminating mandatory retirement at any age.

2. Eliminating bona fide plan exemptions.

3. Requiring retirement plan accruals and full welfare plan coverage for active employees at any age.

Fortunately, no action was taken, but the issue is not dead.

MR. DAVID S. WILLIAMS: On the subject of Human Rights in Canada, it is generally accepted, I think, that regulations are coming some time during the next few years which will affect the design of LTD benefits in several ways--specifically, with regard to maternity benefits, coverage for the physically handicapped, and elimination of the mandatory retirement age.

Maternity Benefits

Federal Human Rights legislation currently compels employers falling under Federal jurisdiction to provide employees with disability and health insurance benefits during the period of time surrounding delivery when the employee is physically unable to work. Such maternity leave is subject to the usual medical certificate and other plan requirements. These benefits must be provided on at least as favourable terms as those available to employees on other types of leave. Officials of the Federal Human Rights Commission reckoned that loss of time benefits would be paid for about three to five weeks on average, though a number of Insurance Company Medical

directors who were consulted anticipate that the period of "medical inability to work" would more probably be six to ten weeks. Presumably the federal officials base their opinion on the experience under the Civil Service plans.

In any event, maternity leave benefits would not seem to be a problem except for LTD plans with unusually short elimination periods. Where a maternity leave has to be extended because of complications of pregnancy, or an unrelated disability, LTD coverage would of course be extended as it is now.

Providing that the individual provinces of Canada do not bring in regulations which are more severe than those of the Federal Government, the maternity leave requirement should not present a significant problem for the vast majority of LTD plans.

The Physically Handicapped

It is anticipated that several provinces will soon have regulations in effect. These will require employers with LTD plans to extend coverage to physically handicapped employees, subject to a one-year pre-existing conditions clause for groups of less than 25 lives. The insurance industry has registered some concern about the impact of this requirement, in particular on groups slightly larger than 25 lives. It could result in certain employees with long-standing chronic conditions being in a position to file a claim for disability benefits immediately upon becoming eligible for coverage. A number of chronic conditions are potentially but not necessarily disabling, so that whether the individual chooses to work or to go on claim would be largely a matter of motivation. The generosity of the benefit formula would also have an influence. The pre-existing conditions clause has often been found to be of rather limited value, and when it is invoked, often has a damaging effect on public relations. Consequently, some companies have tended to revert to a waiting period for coverage following the date of employment. This latter approach would be helpful in reducing the extra cost of extending LTD coverage to handicapped employees. If such persons are in reasonably stable health, and given their generally high degree of motivation, they are probably better risks than one might expect.

Revision of the Mandatory Retirement Age

This has already come about in the United States with the advent of the ADEA in January, 1979, and can be expected to be introduced into Canada for the same general reasons. There are a number of factors in both countries which are exerting pressure on the mandatory retirement age principle, and this will ultimately have a substantial effect on pension plans, as well as the LTD plans which are designed to dovetail with them.

Recent studies suggest that the proportion of workers that have continued to stay on past age 65 is much higher than was anticipated when the ADEA took effect. This is thought to have resulted primarily from continuing double digit inflation. However, the proportion of employees reaching age 65 in good health is increasing markedly. This will also promote a higher rate of retirement postponement.

The historical trend towards progressively earlier retirement may have ended and, if so, I am sure that we will have ADEA-type legislation in Canada in a very few years.

One tends to jump to the conclusion that, though this may be beneficial for Government and Employer Pension Plan financing, the cost of LTD plans will increase significantly. However, the extent of the increase will depend upon the average state of health of continuing employees, which will in turn depend on a number of factors, some of which are difficult to get a good fix on. The type of industry, the general state of employer-employee relations, and the skill with which an employer deploys the senior members of his workforce, are all important, but the net effect on costs is none too clear.

To summarize, there will be a period of transition, in which claim costs may be rather volatile and difficult to predict. I am inclined to believe though that the net effect upon the cost of most LTD plans will ultimately be modest.

Recent Trends in Morbidity

During the 1960's and into the mid-seventies, termination and frequency rates under U.S. Group LTD coverage both followed distinctly adverse trends. These trends also appeared in Canada, though they have apparently been more moderate, probably because of the relatively smaller level of Government disability pensions in Canada and because over-insurance of individuals has occurred less frequently.

It is surprising that the improvement of life-styles and the major advances in controlling hypertension, which have contributed so substantially to a dramatic improvement in mortality during the 1970's have apparently had so little beneficial effect on the incidence of disability. On the other hand, the impact upon continuance experience is not generally regarded as having been significant either, even though it is suspected that mortality rates have been decreasing even more rapidly among disabled lives than for healthy individuals. It seems clear that the major factors affecting mortality trends during the last ten years have been overshadowed by other influences insofar as their effect upon LTD experience is concerned.

In any event, during the last several years both frequency and termination rates seem to have more or less stabilized in Canada. Since an intercompany study of Canadian experience is not yet available, I can only comment with authority on behalf of my own company. Experience has reportedly deteriorated markedly during the last few years for some jumbo groups, but this can be traced to problems which are peculiar to the groups involved.

For Canadian LTD business, exclusive of these jumbo groups, in my Company, we continue to find 1964 CDT termination rates appropriate for reserving purposes after the first year or two of disability. The CDT first year termination rates are too conservative for group business, which is not surprising since the Commissioners' table was developed from individual data. Our first year termination rates for valuation purposes are 50% of CDT tabular rates: this percentage would be higher if "one-payment claims" were included, but such claims should not be included in the experience upon which a valuation table is based. Incidentally, an interesting point arises in valuing LTD benefits which are integrated with government disability pensions. When a claim is submitted, and the claimant's application for a government disability pension has not yet been approved, the question arises

as to what allowance for the government pension offset should be made for reserving purposes. Practices differ among LTD insurers, and will depend to some extent on whether the insurer is making claim payments on a "gross" basis or net of the estimated government pension entitlement. Because of the difference in the relative size of the government pension in Canada, as compared with the U.S., claims practices may differ between the two countries.

The most conservative practice would of course be to reserve for each claim on a gross basis until notification was actually received that the government pension had been awarded. Some smaller companies may base their practice on the assessment of each claim on a seriatim basis and still others will use approximate methods based on past experience regarding the frequency of claim awards. When profit margins are slim, different reserving practices have a significant impact. Perhaps, we can discuss this during the question period.

Underwriting & Costing of LTD Plans in Recessionary Times

In the U.S., a significant correlation has been shown during the last ten to fifteen years between the level of unemployment and the incidence rate of group LTD claims. An inspection of these two time series side by side indicates though that they are not running on parallel tracks: there are obviously other factors at work. These are mentioned by John Miller in his excellent article in the April 1980 issue of "Benefits International":

- Overinsurance caused by the aggressive marketing of IHI policies and the Social Security Cash Disability Benefits which commenced in the early sixties and were greatly liberalized by the indexing provisions of 1972.

- Weakening of the work ethic, and a general sense of alienation.

- The increasing tendency to litigate disability determinations.

- The increasing tendency to regard government disability payments as a right rather than a privilege.

The correlation of claim incidence rates with unemployment rates seems to have been less marked in Canada (though statistics to demonstrate this are, to say the least, sparse). If past experience is a reliable guide, we would not expect a recession in Canada to have a significant impact on LTD termination rates either. However, as an underwriter, if I anticipated a truly major recession some time during the next several years, I would want to be particularly careful in underwriting certain occupational groups, particularly those with a high proportion of blue collar workers. I would want to avoid relatively generous benefit schedules, and plans which provided for a significant degree of CPI indexing. The disability definition and claims administration for groups in cyclical industries should probably be given more attention, particularly with regard to mental and musculoskeletal disorders (or in more mundane terms, depressions and painful backs).

For this reason, in operating LTD plans which are partially or fully experience-rated, I think it would be desirable to provide for contingency reserve margins, credibility factor holdbacks, or limited hold harmless

agreements, in order to permit the plan to weather temporary adverse claims experience without reaching a state of ruin (or as we would prefer to say to our group policyholder, "running into a financial de-stabilization problem").

On the subject of LTD as well as other Health benefits, the most important thing I have to say today is this. The health insurance industry cannot afford to ignore the mounting evidence that it is in a position to make a significant contribution to society. Specifically, it must become more active in the following fields:

1. By making use of rapidly growing expertise in the field of rehabilitation;

2. By rewarding group customers who have commenced employee health promotion programs, with premium discounts, and by emphasizing the associated increase in employee motivation and productivity;

3. By employing on-staff consultants to advise on health program development, monitoring procedures, and the necessary ancillary services.

At Canada Life, we have been pleased with the results achieved by our own staff physical fitness program.

There is ample evidence supporting the trend for the individual to assume greater responsibility for his own health and to undertake an "affirmative .ction" program in this regard. The industry will serve itself well, if it gets out in front of this emerging trend, acts to assist it in every way possible, and is widely seen to be playing a positive and significant role in enhancing the health of our citizens.

MR. MARTIN STAEHLIN: In discussing trends in LTD termination and frequency rates, I will first examine data available for general usage, such as the Society of Actuaries' inter-company experience (published annually in the Transactions Reports) and the Disability Continuance Study paper by Kenneth Cox and Robert Shapland. I will then compare the data exhibited by these two with Fireman's Fund's experience.

Trends in LTD Termination Rates

In discussing this topic, I will concentrate on business with a six month elimination period for two reasons. In considering the SOA data, the results on business with different elimination periods is similar to that of the six month elimination period business. Secondly, Fireman's Fund write mostly six month business.

Several facts and/or trends are apparent from the Society of Actuaries' data, specifically relating to the adequacy/inadequacy of using the Commissioner's Disability Table (CDT) as a reserving basis for LTD claimants.

1. There is a definite CDT deficiency at the first year of duration;

2. The CDT inadequacy increases with age (exceptions are early and normal retirement times);

3. The CDT inadequacy increases with duration (same exceptions as in (2) above);

4. There has been deterioration in termination rates (specifically at the first four durations) from 1966 through 1975;

5. To assess the impact of the above on reserve factors, I used an assumed distribution of claimants similar to that of Fireman's Fund. In aggregate, CDT reserve factors (at the end of the 12th month of disablement) are approximately 10 to 15% deficient. In the studies performed by Fireman's Fund, this deficiency translates into termination rates 20 to 30% less than those assumed in the CDT.

Examining the Disability Continuance Study, one notices similar patterns exhibited by the SOA data, again with an eye toward reserving based on the CDT. Specifically, the CDT inadequacy increases as the duration of claim increases. With regard to age at disablement, the middle ages disrupt the pattern of increasing CDT inadequacy with increasing age of disablement. Translating the data of the study to a discussion of disabled life annuities, I used the same distribution of disabled claimants mentioned above. In aggregate, CDT reserve factors are 5 to 10% deficient for the business in this study. It should be noted that the Disability Continuance study excludes first year claimants and, in addition, the data relates to individual disability business (vs. the SOA data which relates to group disability business).

In tracing the recent history of Fireman's Fund's LTD termination rate experience, beginning with the year of disablement 1972, one sees a pattern of deterioration followed by improvement. Specifically, the experience for years of disablement 1972 and 1973 is acceptable. Years of disablement 1974 through 1976 are adversely impacted both by the recession then in effect and a cutback by Fireman's Fund in general claims adjusters. Years of disablement 1977, 1978 and 1979 (preliminary) exhibit very favorable termination experience (i.e. a return to the 1972-73 level).

In general, the Fireman's Fund results are similar to the SOA inter-company experience and that of the Disability Continuance study.

1. There is a definite CDT deficiency for 1st year durations;

2. The CDT inadequacy increases with age;

3. The CDT inadequacy increases with duration

4. In general, there is deterioration in termination rates through year of disablement 1975;

5. Actuarial Department best estimates of the deficiency in reserve factors based on the CDT are in the range of 5 to 10%;

   Here I will note that at the end of 1978, Fireman's Fund adopted a CDT modification which results in 115% of CDT indicated reserves.

In analyzing the results of the termination rate studies performed by Fireman's Fund over the last several years, I have noticed that termination rates are subject to variation across the company's book of business (i.e. defined sub-segments of business can exhibit widely differing characteristics). An analysis of Fireman's Fund termination rates from 1967 through 1979 indicates the following items influence year to year swings in experience: economic conditions, the number of general adjusters utilized, statistical fluctuation. These items, individually or in combination, have caused specific sub-segments of Fireman's Fund's business to exhibit different termination rates as noted below:

The American Medical Association

Fireman's Fund initially wrote this case in 1967. It amounted to approximately $8 million earned premium per year when it cancelled in 1974. For the last several years the only terminations have been by death, as the majority of claims are in the older age brackets, therefore having a reduced potential for recovery. For this defined segment of Fireman's Fund business, we use a reserve basis similar to the characteristics of the group (i.e. a modification to the 1971 Group Annuity Mortality Table (GAM)).

"Problem Cases"

In the period 1967 to 1972, Fireman's Fund wrote a number of cases connected in some way with the aerospace industry. Ensuing economic turbulence in this industry has adversely impacted termination rates. This block of cases has recently exhibited termination rates in the range of 60 to 70% of the CDT. We have affectionately termed this sub-division of our business "Problem Cases".

Other LTD Business

Recent termination experience has averaged 100% of CDT.

Fireman's Fund has not examined termination rates weighted by indemnity to check for adverse selection due to amount, but plans to implement such a study in the near future.

Trends in LTD Frequency Rates

The SOA inter-company experience exhibits a relative stability of frequency from 1972 to 1976 specifically for six month elimination period business. The same can be said in general for the three month and 12 month data; however, at times there is significant year to year variation. All elimination periods exhibit a slight upward trend in frequency when considering the period 1962 through 1976.

Fireman's Fund has not kept records in a form that makes it easy to determine exposure of LTD insureds which is necessary to determine frequency rates. However, an approximate method based on earned premium, adjusted for assumed growth or shrinkage in average premiums per insured, yields results which support the Actuarial Department's projections. The results of this exercise showed no significant trend in frequency rates over the last several years. In slight contradiction to the results of the SOA experience, Fireman's

Fund has experienced a general downward trend in frequency rates from 1973 through 1980. As a corollary to the termination rate studies and IBNR (Incurred But Not Reported) reserve adequacy tests which Fireman's Fund performs on a quarterly basis, we have noted a definite interplay between LTD frequency and termination rates around a recession. We experience a surge in frequency rates as the recession begins which we interpret to be additional claims generated by the uncertain economic conditions. This situation is followed by a surge in termination rates with a 9 to 15 month lag (the length of the lag depending on the length and depth of the recession). We feel the above can be partially explained by the fact that the claims which comprise the initial surge referred to above do not represent "long term" disabilities, but rather are caused by economic fallout. As the economic situation improves, these "claimants" are much more likely to return to work. Fireman's Fund's quarterly reserve studies have generated some interest in setting LTD reserve levels to cover the potential LTD liability as a single item, i.e. a melding of the IBNR and case reserve estimates since these two items are definitely inter-related. The Actuarial Department has not as yet determined how to accomplish this task.

Underwriting & Pricing in Anticipation of Recessions

There are several ways in which the Underwriting and Actuarial Departments of Fireman's Fund monitor the underwriting of LTD business in anticipation of and during economic recessions. Dun and Bradstreet reports are now obtained on all major accounts in advance of pending renewals (Fireman's Fund considers major accounts to be cases with more than $50,000 of annualized premium). We also perform periodic reviews of the types of business we insure for LTD to insure that there is no heavy concentration in industries that will be adversely affected by an economic downturn. To accomplish this, we have a Standard Industry Code (SIC) on our master record card for each account. In addition to the above, when reviewing proposed renewal procedures for a specified account, at times, strict formula weights applied to years of experience will be given less credibility than the actual trend of experience. For example, if a recession is anticipated and we are reviewing a case heavily influenced by economic downturns, a four year pattern of experience loss ratios of 70%, 80%, 90%, 95% (for the most recent partial calendar year) on this case with a desired loss ratio of 90% may indicate a 10% rate increase is in order when a strict application of our renewal formula would have indicated a pass.

In the area of pricing, not much has been done at Fireman's Fund for the last several years. Reserving and underwriting practices (i.e. managing the existing book of business) have been prominent considerations for Fireman's Fund. A pricing review is scheduled for 1981. Specifically with regard to pricing in anticipation of recessions, it certainly seems unclear to me how to accurately time changes in pricing assumptions to coincide with economic recessions. A better method to produce acceptable results during a recession might be through stricter underwriting; for example, stronger industry loads or blue collar loads when a recession is anticipated (or occurring).

MR. BRUCE DIXON: I have been studying our own L.T.D. experience for the period 72 through 80: first 72 to 76 and then 77 through 80. In both of these periods, I have found that, for termination rates, the actual to expected ratios by amount were significantly better than by lives; perhaps this has something to do with blue collar/white collar experience. Have any of you studied your blue collar vs. your white collar experience for claim frequency and/or for termination rates? What sort of results did you find?

MR. WILLIAMS: We have done some studies of incidence rates by lives and amounts and we find that there is some anti-selection going on to the extent of several percentage points. We have not produced studies with regard to continuance. We use amounts only because we are essentially tracking our actual reserves. One of the problems we have in tracking reserves is again with respect to Social Security or the Canada Pension Plan offsets. We have to be sure that the monthly benefit at the beginning of the year for a given claim is the same as the amount at the end of the year; otherwise, we are going to run into problems. I do not know just how some of the other companies that may be represented here handle that but for us it almost has to be done manually. There are some problems in doing it by machine because sometimes the amount increases where we have anticipated the offset and it has not turned out to be as much as we thought or it has not come through at all; in other cases, it is the other way around. As a result, it is a manual job and we have no experience by lives unfortunately.

MR. STAEHLIN: When you look at blue collar/white collar, I assume you are suggesting that blue collar is worse. If you wanted to reserve for blue collar vs. white collar, you would add some sort of a load to blue collar, maybe starting at certain durations. For Fireman's Fund, I would say that we have had adverse experience for professional technical people. Doctors and aero-space engineers were giving us a problem much more so than blue collar. Fireman's Fund did not have enough experience of blue collar vs. white collar to make the statements that you are. There are different sub-segments for each company's group of business; your own credible experience would certainly be a better base to use than broad brush terminations.

MR. VON SCHILLING: Our own experience exhibited a similar pattern but I did not explain it in terms of blue collar/white collar. I tried to explain it in terms of benefit formula; that is, employees who have a low percentage of benefit formula--like 40 or 50%--will claim and stay on longer than employees who come in at a higher benefit formula.

MR. WILLIAMS: Looking at a number of individual claims, the definition of disability is very important. Usually, if you are on an any occupation basis, and you have a blue collar, for example, with a relatively low level of formal education, then it is very difficult to find any occupation for which he is fitted by reason of education, training, experience, etc. Consequently, there are many small claims where rehabilitation is very difficult to achieve. From a practical point of view, there is no gainful employment for which the individual is capable of that he could obtain; therefore, there is a strong tendency just to carry him on claim.

MR. ALAN HOFFMAN: Has pooling L.T.D. or combining L.T.D. with other coverages been considered?

MR. FLEISCHACKER: The interpretative bulletin allows a packaged approach in determining whether an employer complies with the appropriate provisions. The way the EEOC and the Department of Labour have interpreted the law

effectively says that you cannot include Pension Plans or Medical Plans in the package approach; as a result, you are effectively limited to life insurance and disability plans in the package approach and in evaluating your plans. As I understand it, some of the miscellaneous benefits under a Pension Plan, such as life insurance or survivor income can be included in the package approach.

MR. HOFFMAN: If you are worried about L.T.D. experience, are you trying to experience rate it or are you going to pool it? How do you foresee their experience?

MR. FLEISCHACKER: It depends on the size of the employer. The larger ones are probably either self-insuring to a great extent or are on a fully experience rated basis. Of the cases that I am familiar with, most of them are a "stand alone" type plan--they are not pooled with other benefits from an experience rating standpoint.

MR. STAEHLIN: From Fireman's Fund's point of view, we experience rate cases that are over $50,000 of annual premium and manual rate cases with less than $50,000 of annual premium.

MR. WAYNE ROBERTS: How do you handle your reopened claims as far as reserving? In other words, if you terminate a claim because of a doctor certification and then two or three months later the claim comes back indicating he has been disabled, how do you handle that--as an IBNR or do you keep the reserves open for a while?

MR. VON SCHILLING: We do not treat the reinstatements as falling back into the unreported reserve for IBNR. As a valuation actuary, I would have a concern about such reinstatements if they occurred frequently. If they are occurring very seldom the delay in reporting of all terminations provides adequate protection.

MR. ROBERTS: We code the type of terminations as standard and for certain types like end of doctor certification we will actually keep the claims open for 45 days; there is another type which we actually keep open for 30 days. As a result, even though the claims examiner says that I have closed the claim and indicated that we sent the last cheque, we actually, on a reserves table, or at the end of the month, if it falls at that point of time show that claim as being open. That would affect our termination rates if we are doing a study because we would show that actual claim as not being closed at that time.

MR. STAEHLIN: At Firemen's Fund, there is a certain level of subjectivity involved since our claim department will terminate a case only when they feel that they have reasonable evidence that it would close. If it did reopen later, then it would happen; but we have a very low incidence of reopens.

MR. WILLIAMS: If I could just say that many claims which might fall in to that category are involved with rehabilitation at our company and wherever there is a rehabilitation effort going on the claim of course is held open. We want to see how the rehabilitation effort works out on a case-by-case basis before we close off the claim so temporarily we may be paying zero on it and just holding the reserve. After they are satisfied that the claimant has made it back and is reasonably stable in his return to work situation then

the claim goes off the books.

MS. MARSHA BERA: I have a benefit design question. Have you found any favored approach for combining L.T.D. and Pensions in terms of when the pensions may or must commence under ERISA normal retirement age definitions and, for example, a five year safe harbour for L.T.D. benefits for people who become disabled at age 60 or greater?

MR. FLEISCHACKER: Under the current ADEA rules the EEOC is looking at the question of allowing an employer to continue payments under the L.T.D. plan and to use a pension offset against that. The question has been addressed to the IRS as to how they would treat it. They apparently have informed the EEOC that they may take the position that when a person reaches normal retirement age and if he is on the Long Term Disability plan, payments under the Pension Plan must start. So the way the interpretive bulletin is laid out right now there is the potential that they could have double payments both from the Pension Plan and the L.T.D. plan and as a result of that the EEOC is looking at the possibility of revising the interpretations so that one could offset the L.T.D. benefits with any payments made under the Pension Plan. One of the conditions that they had said they might impose is that full benefits must be payable to age 70. As far as the actual plan design, I have seen several plans where they have included or left in an offset from the pension plan even though in strict accordance with the interpretive bulletin it is not allowed at this point in time. Most of the plans are using the termination at a specific age or a specific duration approach.

MR. ROBERTS: Mr. Williams mentioned that during a recession the incidence of back injuries seems to increase. Has anyone thought about putting a two year limit on back disabilities?

MR. WILLIAMS. It sounds like a great idea in principle, but when it comes to trying to administer it there are many gray areas. Frequently, of course, you find that a claimant has a number of complaints of which the bad back is only one of them. He not only has a bad back but he is depressed because he has a bad back. You will also run into trouble when you try and sell that to a client. Mental conditions or nervous disorders used to require that the patient be institutionalized in order for the benefit to be payable. That was changed because it was not acceptable in view of the way such disorders were being treated. Now the tendency is to require only that he be under the continuing care of a phsychiatrist rather than just a General Practitioner. You have to be generally providing a benefit that is seen by an employee group as being reasonably standard. If you try and become much more restrictive, particularly on a large group, it is going to be rather difficult to sell since most consultants would advise against it.

MR. VON SCHILLING: Paul, in the presentation of your material, you were discussing the cost of the extension of the pregnancy benefit and you said that the average cost was roughly about two months of benefit payment. You did not indicate as a reference whether you related that to a three month elimination period benefit or a six month elimination benefit. That could be a material point.

MR. FLEISCHACKER: I do not have any specific statistics on whether it applied to the three month or the six month. It was more or less a general comment. The problem that I faced in trying to obtain statistics was that

most companies do not maintain separate statistics for pregnancy disability except on the short term disability but the premiums and the experience are all folded into the overall experience; as a result, they really could not split it out. The comment regarding two months or less was a feeling from reviewing a few claims without any specific reference as to what the elimination period was under the plan.

MR. DICK GARNER: Over the last several years, many large accounts have moved away from a fully insured basis to some form of self insurance. What alternatives to a fully insured basis do your companies offer?

MR. STAEHLIN: We have considered on an individual basis doing ASO stop-loss. We don't have many large accounts. Most of our accounts are in the small medium range so we do not receive many requests. For us it was a decision of resources vs. return. We would have had to commit a number of resources to go into establishing and explaining 501C9 trusts so we have not gone into actively offering it.

MR. WILLIAMS: We are not in the ASO business as far as L.T.D. is concerned but we have a number of clients where we fully experience rate the proceeds or the experience of the policy. Usually we provide for substantial reserves and try and develop an understanding with the policyholder that the surplus is not available upon demand but will be used to reduce rates if the experience seems stable. We pay interest on all funds in hand--all reserves, sometimes even cash flow---under one of several investment models. It tends to be a short term investment model these days and frequently in Canada involves crediting rates to the policyholder of 11% or more.

MR. VON SCHILLING: The question could be answered relative to the market you are dealing in. In other words, the U.S. market is different than the Canadian market because of the effects of the Income Tax Act and how it affects the insurer. In the Canadian market, experience rating occurs at quite low levels through a credibility formula or by experiencing the first "n" number of years of payout and pooling thereafter. The larger the case the larger is "n" until you get to a fully experience rated basis. On top of this you have the "administrative services only" route with or without the stop-loss.

Paul, in his presentation of the material dealing with design of benefits to cover the retirement age extension, made it clear that the guiding principle was the equality of cost. In other words, you could offer a lower benefit to a 65 year old than to a 60 year old because of the differences in cost. The Canadian Human Rights bodies have not indicated that they appreciate the equality of cost principle. If the Canadian Human Rights authorities do not follow that principle, what do you see happening on the L.T.D. benefit design questions?

MR. WILLIAMS: I would like to be able to answer that with some assurance but cannot because legislators often tend to be more influenced by consumer rights groups and human rights groups than they are by insurance industry briefs. Much of it is going to depend on the way in which the mandatory retirement age is altered and it could easily go somewhat further than ADEA has gone in the States. In any event, it will have to be **inseparably** linked with pension plan design.

MR. VON SCHILLING: Both Martin and Dave in their presentations made it clear that when you deal with establishing the reserve for any particular group you have to be very cognizant of the characteristics of the group whether it be a blue collar, white collar, own occupation, any occupation definition, benefit formula--the same characteristics as you recognize in the pricing. I wonder whether you care to comment on what characteristics you would like to see recognized in the reserving process, and to what extent we can fall down in our work, our assessment or judgement because we used the process of averaging too frequently.

MR. WILLIAMS: I would like to mention that we have a few large groups where, because of competitive pressures and the need to justify to large employers and their consultants the fact that our reserves are in line with experience, we have modified our reserve tables. Usually, this applies to the incurred but not reported claim, the IBNR, but sometimes it is actually the reserve for disabled lives that requires modification. We have a few plans, for example, where there is a high concentration of the young ages, with high incidence but very rapid and much higher than average recoveries. In those cases, we do make a modification which affects the way we reserve for these groups for statement purposes. The need to get our results out on time to make quarterly statements and do them on a reasonably accurate basis means that we are limited in the degree of finesse we can use in bringing admittedly significant factors but ones that are difficult to program into the calculation. There is a necessary trade-off between accuracy and speed.

MR. STAEHLIN: One has to look at all sorts of different factors but I would hesitate to say that one should reserve on any basis other than age at disability and duration from disablement. If your mix of business ever changes and you have included characteristics other than age and duration in your calculations, then you are forced to say well in aggregate now these reserves are over adequate or not adequate and now I need to modify again. So from the point of view of an actuary in desiring additional analysis, I certainly would look at those factors but to see how it could be absorbed as it were into a system or a schematic that would just reserve on duration and age. I would hesitate to put too much detail into the reserving basis.