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LONG TERM DISABILITY INSURANCE

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1. Disability Experience

2. New Benefits

3. Underwriting Rules

MR. ROBERT B. SHAPLAND: Individual disability insurance is a timely subject. After 25 years of satisfactory experience following World War II, claim costs have begun to deteriorate. In spite of the losses that are being incurred, I have the feeling that most of you share my conviction that our industry's relationship with this coverage can be reestablished as a sound one. We should not delude ourselves however into thinking that the market that existed many years ago can ever be reestablished in total. Disability benefits from other sources have grown rapidly and this means that we must redefine our relationship with disability insurance in context with this competition. Sociological changes have also taken place which we must react to.

On the surface, disability would appear to be purely a physical phenomenon. As such, one would not expect disability insurance to deteriorate unless the health of the population deteriorated. But we know that while disability experience has been deteriorating, national health has not. An in-depth analysis of disability indicates that being disabled is psychological as well as a physical condition. In other words, whether or not a person works is also based on his need or will to work. In the final analysis, physical impairments that independently keep a person from working completely may be rare. For example, there are people confined to wheelchairs, terminally ill with cancer, etc. who are working full-time and are self-supporting. It is therefore changes in the need or will to work that have increased disability claims and produced unsatisfactory experience in recent years. We are not here today, however, to discuss at length the reasons for the deterioration in disability experience. I believe most of us are aware of the sociological and/or political changes that are taking place in this country and others that have affected the social mores of the citizenry by shifting responsibility from the individual to society. In addition, economics plays a strong position in affecting a person's attitude toward work. If one were forced to work to obtain his daily needs, almost no physical condition would thwart that activity. On the other hand, if one's economic situation places him in a position where he does not have to work to satisfy his daily needs and wants, then his commitment to work is easily changed. This latter situation now exists and is affecting disability experience.

The three panelists will cover three different aspects of the current status of individual disability insurance. Monte Hopper will talk about the morbidity status. His discussion will be in terms of the deterioration that has taken place in recent years up to the present. Bob Meredith will discuss the product changes that have been made or are being considered to avoid duplication (overinsurance) with other benefits. Ernie Frankovich will discuss the use of underwriting rules in returning disability insurance to a financially sound product.

In order for the panel to be able to base their analysis on up-to-date information, we undertook an in-depth survey of the experience and practices of the major writers of disability insurance. Responses to this survey were received from 35 companies producing approximately 25% of the disability insurance written by our industry.

MR. MONTE J. HOPPER: This panel, earlier this Spring, sent questionnaires to 44 companies that are prominent in the disability income business in order to obtain information regarding recent disability experience, new products and underwriting rules. We received responses from 35 companies.

I tabulated the data from the experience section of the questionnaires. This information is shown in Exhibits I - IV. I would like to cover some of the more important details of the data here today.

Part of the information that we asked for was estimates of the claim cost ratios in each of the years 1971-76 to the 1970 experience for group and individual business, separately. Thirty-one companies were able to furnish such estimates for their individual disability business and 18 were able to do so for their group business. The results were dramatic. Almost without exception, companies showed significant increases in claim cost ratios for their individual business over the period 1971-76 related to 1970. On a numerical average basis the individual ratios were:

1971	1.06
1972	1.15
1973	1.26
1974	1.28
1975	1.39
1976	1.47

The five largest companies in terms of individual premium volume had the following ratios:

1971	1.06
1972	1.17
1973	1.20
1974	1.28
1975	1.34
1976	1.34

Except for a leveling out in 1976, these ratios are almost identical to the "all company" ratios.

The ten largest companies in terms of individual premium volume had these ratios:

1971	1.06
1972	1.16
1973	1.20
1974	1.28
1975	1.34
1976	1.46

The group carriers also had increased claim cost ratios during the period although somewhat flatter and more erratic. On a numerical average basis the group ratios were:

1971	1.06
1972	.93
1973	1.03
1974	1.05
1975	1.17
1976	1.09

The five largest companies fared somewhat worse than the total group:

1971	1.12
1972	1.09
1973	1.24
1974	1.27
1975	1.34
1976	1.17

Another question asked on our questionnaire had to do with the percent of claim cost increase due to increasing frequencies vs. increasing durations. Seventeen companies were able to respond about their individual business. Eleven of these companies reported that 100% of their increased claim costs were due to increasing durations. The remaining six companies reported that approximately 25% of the increase in their claim costs were due to increasing frequencies, with 75% due to increased durations.

We also asked companies to indicate which states have had poor experience (125% or more) relative to the national average. As might be expected, California headed the list, being mentioned by 21 companies as a problem state. For those 21 companies the claim cost ratio in California averaged 1.71. Rhode Island was the next most frequently mentioned state being mentioned by nine companies and averaging 170% of the national average. New York was the third most frequently mentioned state being mentioned by eight companies and averaging 152% of the national average for the eight companies. Arizona, Michigan, New Jersey, and Florida were mentioned also, in that order, as being problems. It is interesting to note the notorious position of the Cash Sickness states - California, Rhode Island, New York and New Jersey. Only a few states were left completely untainted. The largest block of states by region was the Midwest with Indiana, Iowa, Missouri, Nebraska, Ohio, South Dakota and Wisconsin being excluded from the problem list. Delaware, Maryland, North Carolina and, surprisingly with all its Federal Employees, the District of Columbia, were not mentioned. A few other scattered states were not mentioned: Colorado, Hawaii, Maine, Oklahoma and Vermont.

A few companies were able to give us information relative to the deterioration in experience by occupation and sex. The majority reported that the greatest deterioration had taken place in the blue collar occupations. The majority also reported about the same deterioration for males and females, although some companies reported more deterioration for males than females.

We also asked companies to list their most troublesome occupations. Air Traffic Controllers and Truck Drivers were the worst. Also mentioned were Federal Employees and certain Sales type occupations.

Two companies that issue both return of premium (cash value) and non-return of premium products stated, respectively, that their experience under the return of premium products was 80% and 85% of that under their non-return products. Perhaps this is a way of controlling claim costs in the future.

Overinsurance is a subject that is receiving much discussion these days. Seven companies indicated that they had performed studies indicating the effect of overinsurance or replacement ratios on claim costs. I will quote directly the comments made by these, all quite large, companies:

Company A

"Group - There is a definite relationship between percent of salary insured and experience. Experience on cases under 60% of salary is 5.5% - 136% better than on cases over 60% of salary."

Company B

"Individual - General studies indicate claim costs have increased faster than the average for situations where overinsurance is most likely to occur."

Company C

"Individual - Strong correlation of loss ratio to size of policy although we only write $100 - $500 per month policies."

Company D

"Individual - The ratio of the average monthly indemnity on claims incurred to the average monthly indemnity on policies in force has been increasing for the better occupational classes."

"A study of over 800 policyholders on claim for over 12 months indicated: (a) about 80% receiving benefits from other sources and (b) about 30% receiving benefits in excess of 60% of pre-disability take-home pay."

Company E

"Individual - We believe from general observations that claim costs are affected by the benefits available in Cash Sickness states. Offsets to the benefits we will issue are now required in these states. We are less convinced, so far, of the effects of Social Security."

Company F

"Individual - For insureds with incomes under $1,000 per month, no effect seen on replacement ratios. 40% of our business is on insureds with incomes under $1,000 per month with replacement ratios over 100%. This block experienced loss ratios less than the average for the entire block."

"For insureds with incomes $1,000 - $1,799 per month, loss ratios increase as replacement ratios increase."

"For insureds with incomes $1,800 and over per month, results may not be credible. Most experience was for replacement ratios under 80% and loss ratios increased there with an increase in replacement ratios."

Company G

"Group - Results were consistent with SOA intercompany analysis."

The alleged causes of the deterioration in experience have been often mentioned and I will not bore you with all of them here today. I cannot resist mentioning a few, however:

1. The head-long rush in the early 70's to increase the liberality of our definitions, often without any increase in premium, and the large increases in amounts that companies were willing to write.

2. The increase in the availability of other privately provided disability benefits such as group LTD, association - franchise plans, salary continuation plans and sick-pay plans. These coverages are often obtained without regard to existing individual coverages.

3. The dramatic increases in social disability benefits, primarily Social Security and Workers' Compensation. These increases, when coupled with equally dramatic increases in nondisability income transfer programs such as unemployment benefits, welfare benefits, and even food stamps, have led to rising expectations on the part of the American public to be "provided for" by sources other than their own earnings capabilities.

4. The increasingly liberal claim handling procedures brought about by industry reaction to judicial interpretations and regulatory action, and the desire to avoid litigation in settling claims.

5. One other item that deserves mentioning, not as a cause of the claim cost deterioration, but as an impediment to our being able to react to the financial strains brought about by increasing claim costs. That is, the industry's persistence in continuing to issue non-cancellable coverage. I'll have more to say about this later.

I submit that there is not much that we can do about the large block of non-cancellable business that we have now in force. We can tighten up our reinstatement and claim procedures and save a few claim dollars, but, in the process, add to our cost of administration and increase our exposure to litigation. It is my opinion, however, that we will continue to show increasing underwriting losses on this existing business as it matures and as overinsurance continues to take its toll.

So much for existing business. What do we do about future business? Actuarial assumptions with regard to mortality, interest, expenses, and lapses are tenuous at best. Fortunately, in the past under life insurance, we have had improving mortality coupled with higher interest earnings to help offset our higher expenses, and lapses have not been, heretofore, a serious problem. Under disability income however, morbidity is the single most important element in the premium calculation and is the one most difficult to predict over anything but the short-run. There are simply too many outside pressures influencing morbidity over which we in the industry have no control. The effect of actual lapse rates different from those assumed in the premiums also looms large in disability income. For as morbidity deteriorates, lapses are apt to be lighter than assumed, thereby causing claim cost ratios to increase further as more policyholders than expected reach the older more disability-prone ages. Because of these future uncertainties, I believe that the non-cancellable concept is no longer viable, if indeed, it ever was. The sooner we as Actuaries and the industry as a whole realize and admit this, the stronger our industry will become and, in fact, the better we will become at serving the public. The alternative, I'm convinced, will be continuing disability losses, reduced industry capacity to write new business, and ultimately even more governmental encroachment than we have had in the past.

MR. ROBERT A. MEREDITH: In my comments, I will discuss some of the disability product changes being considered in the industry today because of the profitability concerns previously mentioned.

A. Residual Disability Benefit

The residual benefit approach to disability insurance probably appeared initially as an alternative to the long "his occupation" disability definition. Now, this coverage approach seems to be yielding to the same sort of competitive pressure towards liberalization that resulted in the longer and longer "his occupation" definitions. We at The Travelers are considering a residual benefit as one possibility for the future, but are concerned about the following problem areas.

1. Claims Administration

We assume it must be difficult to obtain good information with regard to the claimant's previous income. We know that for many insureds this is a sensitive subject. We also are concerned as to whether a drop in earnings might not be due to an economic or business related fluctuation. We are concerned about the individual who sees a medical problem as a chance for early retirement. We are concerned as to how we handle the self-employed person with accounts receivable.

2. Period of Total Disability Required

Even though at least two companies do not require total disability prior to paying a residual benefit, we believe there should be such a requirement. It would seem that the point at which one attempts to encourage rehabilitation through the use of residual benefits should be carefully chosen. Six months of total disability, or about the time he/she might qualify for Social Security, could be the right point for encouraging rehabilitation. Or, perhaps one year of total disability is more appropriate. I doubt if the typical claimant is ready to consider rehabilitation after only 90 days. Nevertheless, many companies view this differently or have responded to competitive pressure since a 90 day total disability requirement is not unusual.

3. Calculation of the Residual Benefit

Questions include: How large should the minimum benefit be? What basis should be used for earnings; should it be earned income only; should at least one full year's prior earnings be used; should Federal Income Tax filings be used to verify prior earnings; should other disability income be considered as earnings?

4. Occupation Classes Eligible

Many think only the professional type risk should be able to buy residual benefit coverage. Others think that at least the blue collars should be excluded.

5. Policy Provisions

The residual benefit complicates the language necessary for the premium waiver benefit and the recurrent disability definition.

6. "His Occupation"

Even though the residual benefit concept may have been introduced as an alternative to the long "his occupation" definitions, competition seems to be at work again. There now are companies coupling the residual benefit with a long "his occupation" period.

7. Effect on Total Disability Duration

Is it possible that the qualification period for the residual benefit will lead claimants to "stretch" their total disability in order to qualify for the residual? This might be an argument in favor of longer qualification periods.

Despite the above problems, the concept of a residual benefit coverage seems socially desirable.

B. Product Changes Aimed at the Overinsurance Problem

The remainder of my comments will be devoted to policy provisions and benefit structures designed to alleviate the problem of overinsurance.

1. "Relation of Earnings to Insurance" Provision

First, there has been renewed interest in the "relation of earnings to insurance" provision. The HIAA called a special meeting of "chief executive officers" in Atlanta on May 3, 1977, to discuss the disability income overinsurance problem. Many at that meeting believe that there should be a mandatory "relation of earnings to insurance" provision applicable to all sources of disability income. As a result of this Atlanta meeting, the HIAA has been asked to undertake further studies of overinsurance and techniques for providing overinsurance safe guards. A committee is to be formed with the charge to make a recommendation to the HIAA Board of Directors in time for their consideration during the October 1977 Individual Health Insurance Forum.

2. Product Attempts at Integration with Social Insurance

At least three companies have introduced provisions into their disability products that change the disability benefits to be paid depending on certain social insurance benefit payments. These companies and their approaches are as follows:

a. Pennsylvania Life - Integrated Disability Product

This policy has a life-time accident and sickness benefit period, except that for non-confining sickness, the benefit period is 12 months. The disability benefit is integrated with the Social Security retirement and disability benefit. If, prior to age 65, the insured elects to receive Social Security retirement or disability benefits, the disability benefit payable will be reduced by 50%, but not more than 90% of the Social Security benefit. The maximum benefit amount that is offered under this product is $500.

Tennessee and Maryland did not approve the product. It was not filed in Arkansas, New York, Pennsylvania, Alaska, Vermont, and Hawaii.

b. Monarch SSC Rider — Rider Providing Additional Monthly Indemnity for Total Disability Contingent upon Denial of Disability Under Social Security

This rider carries a one-year waiting period. At the end of one year, the company will pay an additional monthly indemnity provided that the insured has met the coverage requirements for Social Security benefits, has applied for Social Security and not been approved, and has filed for reconsideration, requested a hearing, requested an appeal and where applicable, reapplied. Payments under the rider will not continue beyond the indemnity limit of the policy, or approval for Social Security benefits, or termination of total disability. Monarch is still awaiting approval in New York, New Jersey, Maryland, Connecticut and Texas.

c. Guardian — SIS Rider — Social Insurance Supplement Rider

This rider has the same waiting period as the basic policy to which it is attached. The indemnity period is that of the basic policy but not past 65 or prior acceptance of Social Security retirement benefits. Although the rider can be attached to non-cancellable policies, the premium rate on the rider can be increased to the rate charged for the policy if the insured becomes ineligible for any social insurance benefits affecting the rider. The insured can increase or decrease rider benefits if social insurance plans change in the future.

The significant difference between this rider and the rider Monarch is offering is that this rider not only does not pay if Social Security benefits are being received, it does not pay if Workers' Compensation or no-fault automobile benefits are being received.

3. Individual Programming Concept Under Consideration at The Travelers

The above product approaches have certain short-comings.

a. Other insurance obtained subsequent to issue is not considered.

b. The insured's income level may change either upward or downward after issue, thus changing his need for disability insurance.

We at The Travelers have been developing a policy which allows for individual programming of benefits to accommodate the changing needs of our insureds. We submitted the conceptual design of this product to each State Insurance Department for their comments and opinions as to whether such a product would be approvable under their laws, rules and regulations.

Let me give you the general characteristics of this policy and then summarize for you the comments we received from the various states.

The Product Concept

The policy will be guaranteed renewable to the earlier of age 65 or retirement from active full-time employment (30 hours or more per week). It will have the traditional indemnity periods of two years, five years, or to age 65. We currently require at least a 30 day waiting period on all our disability products and will on this product also.

Unlike traditional guaranteed renewable disability income protection policies which provide a fixed benefit for the life of the policy, our policy will guarantee, without evidence of insurability subsequent to issue, a level of disability income protection in relation to the insured's income. The insured, at the time of initial application, may elect a percentage of income (participation percentage) which he feels he requires to satisfy his needs in the event he becomes totally disabled. The participation percentage will be subject to established underwriting maximums. The initial application will elicit the usual medical history, income, family status, (so that we can estimate his Social Security total disability benefit) and other disability income protection coverage.

We will compute the total disability benefit to be paid during the first six months, less the waiting period, by multiplying income by the participation percentage and subtracting the other disability income protection benefits, exclusive of Workers' Compensation. For the total disability benefit to be paid after the first six months, we also subtract the anticipated Social Security benefit. The remainders in each case will be the amounts of total disability benefit we will provide for a period of three years. Prior to each triennial policy anniversary, we will send the insured a new application which will only elicit his current income, family status and other disability income protection benefits. Subject to the Company's maximum limits, a new total disability benefit will be computed using the participation percentage he initially elected. The new total disability benefits will remain in force for three years. This programming will be repeated prior to each triennial policy anniversary. A change in events, i.e. income, family status or other disability income protection benefits, may produce a reduction in the total disability benefit, however, we will not reduce the total disability benefit below a minimum amount and the premium would be reduced accordingly.

The following example demonstrates how we would compute the Total Disability Benefit:

Assume the applicant elects a Participation Percentage of 70% i.e., he determines that in the event he becomes totally disabled he will require a level of disability benefits from all sources equivalent to 70% of his income, to satisfy his needs.

		At Issue	First Triennial Policy Anniversary	Second Triennial Policy Anniversary
1.	Monthly Income	$2,000	$2,500	$3,000
2.	Disability Level Elected (Line 1 x 70%)	1,400	1,750	2,100
3.	Anticipated Social Security	700	400	400
4.	Disability Benefits From Other Sources	0	300	300
	Travelers Total Disability Benefit after six months (Line 2 - Line 3 - Line 4)	700	1,050	1,400
	Workers' Compensation (Based on State of Residence at issue or triennial update)	$ 300	$ 300	$ 300

At the time of loss, we will pay the total disability benefit and in addition thereto if the Social Security Disability Benefit paid is less than the anticipated Social Security benefit, we will pay the difference. Using the above example, if a non-occupational loss occurred during the first three years, we would pay a total disability benefit, after six months, of $700 per month. If Social Security only paid $300 per month, we would pay an additional $400 per month. If the loss were compensable by Workers' Compensation, we would reduce our pay-out by $300.

The Reactions of State Insurance Departments

Most of the state insurance departments were kind enough to give us their thoughts regarding this proposed product. Obviously, the opinions expressed were not as carefully prepared as they would have been if we were making a formal filing.

Nevertheless, we found their comments helpful and encouraging. Many states specifically praised the product approach. Only two called the concept non-approvable.

a. "Time Limit on Certain Defenses" Provision

Several made reference to the "time limit on certain defenses" provision. The success of this program depends on the integrity of the information on the initial and triennial applications. Hence, we will need to modify the "time limit on certain defenses" to preserve the contestable period as to each application. It should be kept in mind that only the initial application will elicit medical history. It may be necessary for us to issue a three-year term policy and renew it for successive terms; this would leave us unprotected against misrepresentation only in the last year of each three.

b. Premium Structure

A few states inquired about the premium structure and active life reserve. Since coverage can decrease as well as increase, concern was expressed as to whether the premiums would also decrease. We also were asked if there would be a refund of active life reserve. One possibility is for the product to be step-rated, with no active life reserve, and with the premium increasing or decreasing as the coverage increases or decreases.

c. Guaranteed Renewability

An important question is whether a product can be called guaranteed renewable if the benefit can be changed. One might argue that guaranteed renewable means the policy provisions cannot be changed. If a policy provision gives us the right to change benefits, the policy still can be called guaranteed renewable.

d. Minimum Benefit

We plan to include a minimum benefit, a level below which coverage may not be reduced. Several states thought this desirable and $200 was a commonly mentioned amount.

e. Definition of Income

Some states asked how we would define income. Would it include unearned income? What period of time would be used for determining income? One approach would be to use a 36-month average of earned income.

f. Social Security Benefit Freeze

Several states reminded us that if the Social Security disability benefit paid increases after commencement of disability, we cannot reduce our pay-out. This product does not.

g. Workers' Compensation

Two states asked for clarification regarding Workers' Compensation reduction. This is not a completion benefit as for Social Security. The actual maximum Workers' Compensation benefit for the particular state as of issue or triennial update will be used as the amount by which we reduce our pay-out.

C. Conclusion

All of us have heard repeatedly of the threats to the profitability of the individual disability business. Many have talked of the dangers of overinsurance, unemployment, the influence on doctors of the malpractice suit threat, the influence on claims adjustors of the punitive damage suit threat, the increasing willingness of the public to enjoy the benefits of disability or social insurance rather than returning to work. The product ideas I have discussed are not going to save us from these dangers. Rather, they are attempts to make the disability product more nearly a vehicle for replacing lost earnings due to disability. Even with these ideas, there is no substitute for a company's continual sound management, with appropriate monitoring, of their disability income portfolio.

MR. ERNIE FRANKOVICH: Since the 1972 Amendments to the Social Security Act, the industry has been deluged by memorandums and articles on the disability benefits available under Social Security. Therefore, discussing the drastic inroads made by the Social Security System into the private disability markets is redundant although it is one reason for the overinsurance problem. This problem, which was mentioned by Monte earlier, appears to be a principal cause of the rising morbidity costs.

Before discussing the results of our survey, let us pause a moment to rethink our ideas about insurance company underwriting. To do this, we must first review what underwriting is and what underwriting rules do. Although they are elementary, the following thoughts come to mind when I think about underwriting and underwriting rules:

1. Underwriting is the insurer's selection of the risks whose experience match the assumptions used in pricing the policy.

2. It is a mechanism for combating antiselection on the part of the prospective insureds and of some of the agents.

3. It is the vehicle bridging past experience and future experience through the present. That is, we use past experience to determine the underwriting rules used in the present which will affect the future experience.

4. It is one of the two excuses used by actuaries when their estimates of morbidity costs are understated (the other is claim handling).

5. It provides the balance between the need to prevent poor financial experience on the policy form and to allow sufficient amounts of new business in order to maintain the growth pattern of the company and the good will of the agency force.

6. It is one of the items that seek to balance the upside risk (profit) and the downside risk (loss).

7. It reflects the belief of management about the future. Liberal underwriting rules reflect an optimistic view of the future and conservative underwriting rules reflect a pessimistic view of the future.

8. Typically underwriting rules, if established today, will determine issues during the next 2 or 3 years and the experience during the next 5-10 years.

As you can see, there are conflicting demands on the insurance company when it establishes underwriting rules. To resolve this conflict, we must look at the past (in the form of the statistical data that is emerging), the present (in the form of benefits and underwriting rules which are currently in effect in other companies) and the future (in the form of changes in the economy, Social Security Benefits, etc.).

Before going further, let us briefly review the two areas (medical and financial) of underwriting. In medical underwriting, the underwriter reviews the answers to the medical questions on the application, the statements of any attending physicians, and the results of the medical exam, if any. Traditionally companies have been more conservative for this than for financial underwriting.

Medical underwriting mostly affects the incidence of disability and slightly affects the average duration of disability caused by sickness. Unfortunately, the effects of this selection wear off over a short time period (2 or 3 years). Thus, the effects on premium are relatively minor in most instances. For example, the estimated costs of disability due to sickness of the younger attained ages in Occupation Class I represents only 45%-50% of the total expected claim costs at these ages. It represents an even smaller percentage of expected costs at the same attained ages for Occupation Class II. Since effective medical underwriting reduces claim costs due to sickness by 20%, 30%, or at most 50%, it produces, at most, a 25%-30% reduction in total claim costs at the younger attained ages in the first few years. Unfortunately, the effects of this selection wear off rapidly until they are negligible by the third policy year.

I am not saying that medical underwriting should be discontinued. Its mere presence reduces the chances of antiselection on the part of the consumer and/or the agent. Instead, I am inferring that medical underwriting may have been overemphasized in the past and that more effort should be placed on the relatively lower cost financial underwriting.

Financial underwriting is more important than medical underwriting because it affects the duration of disability caused by both accident and sickness. In the most recent issue of the Disability Newsletter, John Miller illustrates that a 5% reduction in the termination rate causes a 10%-14% increase in the claim costs. The important fact to remember is that the effect of financial underwriting is not limited to the first two or three policy years but that it affects the expected costs for all durations. In addition, financial underwriting can have a significant effect on the level of claim costs.

You have seen in print, heard from Monte Hopper, and seen with your own experience that the substantial increases in the claim experience are primarily due to increasing lengths of disability. Although this has many possible causes, you will agree that overinsurance is one of the main causes. Although we use the term overinsurance frequently, we seldom take the time to adequately define it. Generally, overinsurance means the excess of disability benefits over disposable income where disposable income is the excess of gross earned income over taxes and employment related expenses. Theoretically, however, overinsurance should be the excess of disability benefits over the amount above which the insured will not feel any incentive to return to work.

Earlier, you heard that we conducted a survey to which 35 companies responded. A part of the survey pertained to their current underwriting rules. The results of this survey are summarized in Exhibits V - VII .

As you are aware, Social Security is a major cause of overinsurance. For example, a young individual age 29 who is disabled after June 30, 1977 with an average monthly earnings of $1,000 during the last two years would have a Primary Disability Benefit of $546.00 or a Maximum Family Benefit of $956.40. Isn't this a mind bender?

Since Social Security is a major factor in overinsurance, let us look at how companies are trying to cope with it. Exhibit V shows that all but one company reflect Social Security benefits in their underwriting rules either implicitly or explicitly. (Pennsylvania Life, the sole exception, has a policy that nonduplicates with Social Security Benefits.) Of the 30 other companies responding to this section, 5 (17%) indicated that they based their underwriting on the actual family status of the insured. Amazingly, there was a wide variation in approaches as the following examples show:

Social Security Basis for Establishing Long Term Underwriting Limits

			Company									
			A		B		C		D		E	
Age	Marital Status	No. of Children	Ind.	Fam.	Ind.	Fam.	Ind.	Fam.	Ind.	Fam.	Ind.	Fam.
25	Single	0	X		X		X		X		X	
25	Married	0	X		X		X		X		X	
25	Married	1	X			X		X		X		X
50	Married	1*		X		X	X		X		X	

Do underwriting limits vary by age? If yes, how many age breaks.

	A	B	C	D	E
	No	Yes 2	No	Yes 3	Yes

*Child will terminate dependency in 2 years.

Of those 23 companies that did not vary their limit with the insured's family status, 15 (65%) based their underwriting limits on a composite of the individual and family disability benefits. These figures exclude two companies which used Social Security benefits indirectly in setting their underwriting limits.

In the survey, we asked for the maximum amount of disability benefits for each combination of 3 age groups (25, 40 and 55), 3 annual income levels ($10,000, $20,000 and $30,000) and 5 occupation classes (physicians, lawyers, plumbers, farmers, and truck drivers). Since there was extreme variation, Exhibit VI shows the highest amount, the median amount, and the lowest amount that would be issued. If the company would not issue a policy to a given occupation, they were not considered in those cells.

Although there was a wide variation in limits, the following patterns emerged:

1. Generally, the maximum amount that will be issued was independent of occupation class. This was probably due to the relatively low income amounts used.

2. A number of companies (8 out of 29) gave individual attention to physicians and/or lawyers (primarily issue age 25) and thus allowed larger than normal amounts to be issued in certain circumstances.

3. Typically the occupation affected the maximum indemnity period that would be issued.

We thus see a wide variation in approaches and in the maximum amount that will be issued in various circumstances. The actual financial results will obviously vary by individual company circumstance and thus there is not a single correct answer to underwriting rules which implicitly or explicitly reflect Social Security disability benefits.

In the survey, we also asked if other sources of disability income insurance were considered in determining the maximum amount of disability benefits that could be issued to an individual. Exhibit VII summarizes the results. Essentially all companies considered salary continuation benefits, long term group benefits, state disability plans, and other individual insurance when determining the maximum amount that will be issued to the individual. Less than one third of the companies considered Workers' Compensation in their individual limits, however. Slightly more than two thirds of the responders considered disability benefits under group pension plans in determining the maximum amount that can be issued to an individual.

Unfortunately, these survey results may be somewhat misleading. Those answering yes to these questions are those who would consider these other sources of benefits if they learned about them. Scattered among the responses were comments like "if admitted" and "we would if we knew how." Thus, there appears to be widespread belief that many of these other sources of disability benefits are not reported to the insurance company on the application. In most instances, this is probably due to oversight because specific questions addressing each of these other sources of disability benefits are generally not asked on the application. As a result, the applicant and the agent easily forget about salary continuation plans, short term group disability benefits, disability benefits under group pension plans, etc. Obviously, the result is an understatement of the disability benefits available to the applicant.

Unfortunately, we overlooked three sources of disability benefits when we designed the survey. Therefore we shall hold an informal survey at this time in order to determine how many consider these other sources of disability benefits. Please raise your hands if your company considers credit disability insurance or mortgage disability benefits in determining the maximum amount of disability benefits that will be issued to an individual. Well, it looks like none of the companies represented here consider these benefits because no hands were raised.

I do not agree with this and thus I am now recommending that my clients revise their applications and underwriting rules to include questions about credit disability benefits and mortgage disability benefits. Let me explain my position by relating what is currently happening in Los Angeles. Those of you from that area can easily confirm what I am saying.

Los Angeles is currently involved in a real estate boom with the prices of land and property increasing at rates greater than 15% per year. The current game is to purchase a home with a minimum downpayment ($5,000 or less) and then watch your property increase in value. Credit and mortgage insurance is readily available to cover the monthly mortgage and tax payment which may be in excess of 25% of the individual's gross income. Insurance companies are issuing additional disability benefits on either group or individual programs up to 65% of gross earnings.

One of the justifications for issuing credit and mortgage disability insurance for large loans is that the company insures the mortgage or loan payment while the group and individual disability benefits insure his disposable income. However, the insured pays the monthly mortgage and tax payment from his disposable income. Isn't this another example of the over-insurance problem? I certainly wouldn't want to be insuring homeowners in Los Angeles for disability benefits when the boom bursts.

Another source not included on the survey was disability benefits available on life insurance policies. How many companies represented here consider waiver of premium and/or disability benefits available on life insurance policies in determining the maximum amount that will be issued? Success - there is one company represented in this room that does. I believe that all companies should because there are insurers who currently sell disability income benefits under life insurance policies. These disability benefits have the same benefit structure and underwriting rules that exist for the individual disability income policies marketed by many of you.

The results of our survey can be summarized into the following:

1. There is a wide range of approaches used to consider Social Security Benefits when establishing underwriting limits.

2. There is a wide variance in the maximum issue limits for disability benefits if no other insurance coverage is in force. Much of this variance could be due to the timing of the survey. Within six months one or more of the respondents will probably have changed their maximum issue limits.

3. Almost all of the insurers surveyed consider other sources of disability income benefits. However, practically none of the insurers consider disability benefits available on credit insurance, on life insurance policies, or on mortgage policies in establishing the maximum amount that will be issued to an individual.

4. Only one third of the companies consider Workers' Compensation in establishing the amount of the disability benefits or the type of policy.

In this presentation, we have attempted to present and summarize some of the practices used by insurance companies for financial underwriting of disability income benefits. Before concluding, let me briefly identify the problem areas that the conscientious insurer who stringently underwrites the financial need for disability insurance faces in the near future:

1. Rapid escalation of disability benefit available under Social Security. For an individual age 29 with average monthly earnings of $1,000, disability benefits increased 6% last year. Based on the traditional methods of expressing underwriting rules, this means that insurance companies should be modifying their underwriting rules every two or three years.

2. At the time of application, how does the insurer learn about all disability benefits inforce on the applicant? This would include benefits from sources about which the insured has forgotten or did not know. The three subareas, individual insurance, group insurance, and credit insurance, should be considered.

3. After the contract is issued, how does the insurer protect itself when the insured purchases additional disability coverage from other insurance companies and thus becomes overinsured? Earlier we heard from Bob Meredith who spoke about the approach that Travelers is considering to combat the overinsurance problem. However, they may not have contemplated asking about credit disability insurance, mortgage disability insurance or disability insurance on life insurance policies. It is also possible that the relatively dormant policy provisions "Relation of Benefits to Earnings", will be resurrected to provide needed protection.

In conclusion, we are seeing companies become more concerned about financial underwriting due to the severe overinsurance problem. We hope that some of the things said here will help you establish underwriting rules that will minimize the overinsurance problem.

MR. JAMES J. OLSEN: Statistics that show that the average monthly benefit is higher on claims than inforce may not be meaningful. This is because Prudential studies show that experience gets better, in a general way, each succeeding year after issue. Since current sales have a higher average monthly benefit than those of past years, this experience trend accounts for the higher average benefits on claims. We have also been studying a three-year renewable plan and have run into a rating problem. Because of heavy acquisition expenses, the premium the first three years is about the same as for a level to age 65 premium plan and is thus noncompetitive. If these coordinated benefit plans are adopted to eliminate overinsurance, I suspect we are going to use today's claim costs in calculating premiums, not the costs of the 1950's and 1960's. In other words, I wonder if the overinsurance problem isn't overrated to some extent and today's experience is just normal for today and is not going to improve.

MR. DONALD M. PEARSALL: This January, John Hancock introduced a new plan to the professional market written in addition to regular non-can. The additional benefits are adjusted every two years, upward or downward, based on the insured's income and the financial underwriting rules then in use. The regular non-can benefits are rated on a term to 65 basis while the additional benefit rates are two-year term premiums.

MR. J. CALVIN WINTER: Some of us perhaps set too limited horizons on what environment we can change. Regardless of what approach we take, Social Security may eventually eliminate this market altogether. I therefore wonder what we might consider as a profession in changing this situation.

MR. FRANKOVICH: While there has been material written on de-coupling disability benefits from the escalator feature in the retirement benefit formula, I have seen little about de-coupling disability benefits from retirement benefits (Moderator's Note: in order to limit disability benefits to reasonable levels, especially at the young ages).

MR. SHAPLAND: While disability experience has been deteriorating, there are some favorable signs. For one, Social Security disability frequencies showed a reduction in 1976 after many years of continual increase. Secondly, group insurance has shown less deterioration than individual insurance. This may be due to the fact that the insured has a job to return to, the employer has a financial interest in his returning to work (in order to avoid experience rating increases), and group benefits are coordinated with Social Security.

Exhibit I

Individual Disability Income
Claim Cost Ratios to 1970 Experience

Company	1971	1972	1973	1974	1975	1976
1	1.07	1.20	1.27	1.37	1.18	N.A.
2	1.00	1.04	1.11	1.21	N.A.	N.A.
3	1.20	1.30	1.40	1.50	1.60	1.70
4	.84	1.12	1.01	1.50	1.38	1.59
5	1.02	1.12	1.22	1.32	1.34	1.23
6	.97	1.07	1.05	.96	1.17	1.46
7	.96	1.08	1.24	1.26	1.41	1.42
8	.97	1.27	1.28	1.38	1.64	1.66
9	1.00	.95	1.02	1.08	1.33	1.37
10	N.A.	1.00	1.08	1.29	1.35	1.49
11	1.04	1.14	1.23	1.05	N.A.	N.A.
12	1.05	.86	1.14	.98	1.30	1.30
13	1.09	1.15	1.23	1.30	1.25	1.20
14	1.04	1.23	1.27	1.33	1.74	1.33
15	1.23	1.22	1.00	1.36	1.44	2.27
16	1.22	1.34	1.31	1.34	1.47	1.57
17	1.01	1.14	1.11	1.18	1.22	1.17
18	.99	1.02	1.03	1.08	1.19	1.17
19	1.17	1.27	1.19	1.28	1.33	1.35
20	1.00	1.29	1.32	1.35	1.43	N.A.
21	1.07	1.14	1.24	1.38	1.51	1.55
22	.80	1.29	1.13	.70	.86	1.04
23	1.01	.99	1.09	1.25	1.37	1.50
24	.79	.99	.97	1.32	1.10	1.13
25	.98	1.29	1.19	1.04	1.29	1.37
26	.93	1.22	1.65	1.46	1.63	1.57
27	1.82	1.88	2.16	2.90	1.69	2.34
28	N.A.	N.A.	N.A.	1.00	1.27	N.A.
29	.94	1.16	.97	1.28	1.34	1.20
30	1.37	.80	2.86	1.05	2.36	1.53
31	N.A.	1.00	1.15	1.23	1.15	1.67
Averages:						
All Companies	1.06	1.15	1.26	1.28	1.39	1.47
5 Largest	1.06	1.17	1.20	1.28	1.34	1.34
10 Largest	1.06	1.16	1.20	1.28	1.34	1.46

Compiled from questionnaires sent to 44 companies by the Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.

Exhibit II

Group Long Term Disability
Claim Cost Ratios to 1970 Experience

Company	1971	1972	1973	1974	1975	1976
1	1.39	1.10	1.55	1.33	1.26	1.53
2	1.45	1.50	1.25	1.35	1.30	1.30
3	1.01	1.00	1.03	1.11	1.08	.92
4	.77	1.14	1.14	1.04	1.11	.96
5	N.A.	N.A.	1.00	1.01	1.03	1.13
6	N.A.	N.A.	.77	.79	1.28	1.09
7	1.00	.63	1.11	1.14	1.30	1.15
8	1.01	.92	.88	.98	1.31	1.02
9	.88	.84	.80	.79	1.01	1.03
10	.94	.71	.81	.72	1.26	1.08
11	.91	.83	.89	.85	.85	.83
12	1.90	.91	1.07	1.19	1.32	1.19
13	1.09	.97	1.00	.98	.93	.99
14	1.02	.96	.95	1.11	1.26	1.26
15	.82	.73	.73	.80	.80	N.A.
16	.73	.95	1.48	1.59	1.73	1.07
17	1.00	.87	.97	.91	1.04	.90
18	1.00	.77	1.11	1.17	1.23	1.07
Averages:						
All Companies	1.06	.93	1.03	1.05	1.17	1.09
5 Largest	1.12	1.09	1.24	1.27	1.34	1.17

Compiled from questionnaires sent to 44 companies by the Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.

Exhibit III

Disability Income
Individual Business
States with Claim Experience 125% or more
of National Average

States	No. Times Mentioned	Claim Ratios to National Average Low	High	Average
California	21	1.25	2.77	1.71
Rhode Island	9	1.25	2.82	1.70
New York	8	1.25	2.55	1.52
Arizona	6	1.31	3.85	1.94
Michigan	5	1.25	1.50	1.36
New Jersey	5	1.25	1.83	1.54
Florida	4	1.30	2.17	1.55
Connecticut	3	1.25	3.33	2.00
Kentucky	3	1.26	1.44	1.34
Louisiana	3	1.28	2.16	1.72
Oregon	3	1.41	1.60	1.51
South Carolina	3	1.29	1.90	1.55
Washington	3	1.28	1.56	1.50
Alabama	2	1.28	1.78	1.53
Georgia	2	1.38	2.54	1.96
Idaho	2	1.30	2.22	1.76
Kansas	2	2.94	7.65	5.30
Massachusetts	2	1.23	1.60	1.42
Mississippi	2	1.26	1.26	1.26
Nevada	2	1.85	2.02	1.94
New Hampshire	2	1.50	1.91	1.71
New Mexico	2	1.41	1.85	1.63
Puerto Rico	2	1.31	1.49	1.40
Texas	2	1.40	2.10	1.75

States Mentioned Once: Alaska - 1.46, Arkansas - 1.65, Illinois - 1.40, Minnesota - 1.34, Montana - 1.45, North Dakota - 1.97, Pennsylvania - 1.34, Tennessee - 1.89, Utah - 1.35, Virginia - 2.29, West Virginia - 1.30, Wyoming - 2.73.

Compiled from questionnaires sent to 44 companies by the Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.

Exhibit IV

Occupations and Industries with High Relative Claim Costs

Individual-Occupations	Group-Industries
Air Traffic Controllers	Aerospace Labor
Carpenters	Federal Employees
Chiropractors	Gas Utilities
Federal Employees	Hospital Employees
Foremen	Insurance Companies
Grocery Store Employees	Insurance Agents
Restaurant Employees	Legal Services
Salesmen-Door to Door	Manufacturing
-Real Estate	Meat Packing
-Self Employed	Oil Exploration and Construction
Taxi Drivers	Retail Trade
Truck Drivers	School Employees
	Stock Brokers and Non-Banking Financial Management

Compiled from questionnaires sent to 44 companies by the Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.

EXHIBIT V

Underwriting Rules
Recognition of Social Security Benefits

1. Do your underwriting limits reflect Social Security Benefits?

   30 out of 31 said yes, either implicitly or explicitly. The one that said no has a policy that nonduplicates with Social Security.

2. Do your underwriting limits vary by family status?

   5 out of 30 said yes.

3. If your underwriting limits do not vary by family status, which Social Security Benefits do you reflect?

a.	individual disability benefits	3
b.	family disability benefits	3
c.	composite of the two	16
d.	implicitly considered Social Security Benefits but did not indicate how	3

4. Do your underwriting limits vary by age? If so, how many age breaks are there?

No		15	
Yes	One Age Group	5	– obviously indicates a position that did not fit the question
Yes	Two Age Groups	2	
Yes	Three Age Groups	5	

5. What is the maximum short term benefit period you sell which is not subject to your long-term limits reflecting Social Security Benefits?

5 month Benefit	1
6 month Benefit	6
11 month Benefit	1
12 month Benefit	13
24 month Benefit	1
60 month Benefit	1
No response or don't sell short term	7

Compiled from questionnaires sent to 44 companies by Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.

EXHIBIT VI

Current Long-Term Full Occupational Coverage Monthly Limits Where the Only Other Benefits Involved are Family Social Security and Workers Compensation Benefits (Where Applicable)

Annual Income		Physicians	Lawyers	Plumbers	Farmers	Truck Drivers
				Issue Age 25		
$10,000	Highest	$2,000	$1,000	$ 325	$ 400	$ 327
10,000	Median	0	0	0	0	0
10,000	Lowest	0	0	0	0	0
20,000	Highest	2,000	1,000	830	830	830
20,000	Median	620	600	575	517	550
20,000	Lowest	300	300	0	0	0
30,000	Highest	2,000	1,450	1,300	1,200	1,200
30,000	Median	1,080	1,080	1,000	1,000	900
30,000	Lowest	800	800	400	400	400
				Issue Age 40		
$10,000	Highest	$2,000	$1,000	$ 325	$ 400	$ 327
10,000	Median	0	0	0	0	0
10,000	Lowest	0	0	0	0	0
20,000	Highest	2,000	1,000	830	830	830
20,000	Median	600	600	600	575	600
20,000	Lowest	300	300	0	0	0
30,000	Highest	2,000	1,450	1,300	1,250	1,250
30,000	Median	1,080	1,080	1,000	1,000	1,000
30,000	Lowest	800	800	400	400	400
				Issue Age 55		
$10,000	Highest	$1,500	$1,000	$ 360	$ 400	$ 360
10,000	Median	0	0	0	0	0
10,000	Lowest	0	0	0	0	0
20,000	Highest	1,500	1,000	860	860	860
20,000	Median	600	620	600	600	600
20,000	Lowest	350	350	0	0	0
30,000	Highest	1,500	1,450	1,300	1,250	1,250
30,000	Median	1,100	1,125	1,000	1,000	900
30,000	Lowest	800	800	400	400	200

Compiled from questionnaires sent to 44 companies by Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.

EXHIBIT VII

Underwriting Rules
Recognition of Disability Benefits From Other Sources

		Yes	No
A.	Are your issue limits affected by:		
1.	Salary Continuance Plans	28 (90%)	3
2.	Workers Compensation	8 (26%)	23
3.	Short-Term Group Insurance	26 (84%)	5
4.	Long-Term Group Insurance	30 (97%)	1
5.	State Disability Plans	29 (94%)	2
6.	Disability Benefits Under Group Pension Plans	21 (68%)	10
7.	Special Recognition of Certain Employee Plans, such as Federal Employees, Teachers, etc.	25 (81%)	6
8.	Other Individual Insurance	31 (100%)	0
9.	Outside Income (Interest, Etc.)	26 (84%)	5
B.	Recognition of Geographic Experience:		
1.	Special Benefit Limits for States with Adverse Experience	7	24
2.	Special Rates for States with Adverse Experience	5	26

Compiled from questionnaires sent to 44 companies by Disability Income Panel, Society of Actuaries, St. Louis, June, 1977.