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THE NEW INCOME REPLACEMENT POLICIES

Moderator: ROBERT L. SPIES. Panelists: WILLIAM C. KOCH*, JOHN HAYNES MILLER, ANDREW M. PERKINS

- 1. Pros and cons of integrated income replacement policies.
- 2. Are there any regulatory problems so far?
- 3. Recent experience and premium rate considerations.
- 4. Necessary home office support.

MR. ROBERT L. SPIES: Our panel has broad experience with income replacement policies. John Haynes Miller, F.S.A., Consulting Actuary, will start our discussion by describing the history of disability insurance. He will also discuss how integrated benefits work, in general, and some of the main design alternatives that might be considered in developing such a product. Andy Perkins, F.S.A., Actuary for The Travelers, will have comments regarding the actuarial and regulatory aspects of developing a disability income insurance product. Andy was involved in the development of The Travelers° current disability program. Finally, Bill Koch, Health Underwriting Officer for Western Life Insurance Company, will discuss underwriting and marketing aspects of disability income insurance.

MR. JOHN H. MILLER: I am delighted to have the opportunity to discuss what, in my opinion, is an extremely important landmark in the rather hectic history of non-cancellable disability insurance in this country. I will first bring us up to date, in a very brief way, and then I have some further remarks on the residual clause, which I consider to be the Achille[°]s Heel of this new type of policy.

The history of non-can disability insurance goes back to 1885 when a Scottish Company, Century Indemnity Insurance, introduced a policy which is not very different from policies we are selling in this country, and very little different from the policies that are currently sold in England under the name PHI, meaning Permanent Health Insurance - not permanent disability, but a permanent policy.

It was thirty years later when a small company in Boston, the Massachusetts Accident Company, introduced the first non-can disability policy here. It paid for total disability for life and was renewable forever, with no limiting age. The premium was fairly low, and amazingly, this approach seemed to work well for nearly fifteen years. However, it ended in disaster in the early 1930's.

About three years after the introduction by the Mass Accident, a number of the leading life and some casualty companies introduced a similar policy, but with a limiting age of renewal: 60 or 65.

At this time, Mr. William C. Johnson, F.C.A.S., Chief Actuary and Chief Marketing Officer for the Massachusetts Protective Association, forerunner

*Bill Koch, not a member of the Society, is Health Underwriting Officer for Western Life Insurance Company.

of the Paul Revere, cautioned against these unlimited benefits. He recommended, and his company adopted, an aggregate limitation of fifty-two or sixty weeks of benefits. Three years later, other Massachusetts insurance companies adopted a similar contract. They thought the Paul Revere idea of an aggregate limitation was a good thing. However, to gain a competitive advantage, they limited the number of payments on any one claim, and thus was born the benefit period limitation, which commonly is now one year, two years, five years or to age 65. The companies which adopted aggregate limitations or benefit period maximums all survived and prospered. It was their prosperity that lured the leading life companies and others into the business or back into the business.

In 1921, Edmund Camack, transplanted from England, and a famous actuary of the Aetna Life, wrote a paper in Volume VII of the Casualty Actuarial Society Proceedings. In this paper, he presented a table called Camack's Modification of British Manchester Unity. He developed net premiums from this table, and it was very clear from this, as well as from premiums the British companies were charging, that these early non-can writers were offering a liberal policy which was drastically underpriced. The premium rates were the same for all ages for non-can policies renewable to age 60 or 65 and paying benefits for life. This premium was about what the premium should be at age 30. Within a few years, some of these companies began withdrawing from the market, and they had all withdrawn by about 1928. Amazingly, some of the companies which suffered these substantial underwriting losses on non-can disability later coupled disability income benefits with life policies. Perhaps they thought that attaching this difficult non-can disability beast to a well-tamed life insurance policy would improve results. Losses ran, however, into the hundreds of millions of dollars.

The result was that, after 1933-34, nobody was writing any kind of total disability or non-can disability, except the handful of Massachusetts' companies which had followed W. C. Johnson's counsel. In 1934, Mr. E. E. Rhoades, of Mutual Benefit Life, introduced the disability definition which defines disability as reduction in earning power of at least 75%. This definition is essentially the backbone of the new third generation type of policies. The Mutual Benefit policy succeeded from the beginning.

In the 1950's, companies began entering or reentering the field because they saw the money made by the few Massachusetts companies. Health insurance was usually considered a quick sale and a good way to get new agents started. Unfortunately, while these companies generally entered the business on a sound basis, they later began to compete. The early experiences were favorable and led to liberalized policies, particularly with respect to the meaning of disability.

Next came the residual benefit and the new third generation income policy. An important consideration for the structure of these policies is the renewability provision. I have seen an increased tendency for companies to offer guaranteed renewable policies. My analysis of non-can versus guaranteed renewable experience indicates that if you are satisfied with your statistics, the non-can provides greater margin of profit, since you can charge more for it. However, I believe that where residual benefits are included, policies should be offered on a guaranteed renewable basis. The virtue of the guaranteed renewable policy is that if you underprice the product, you can get some remedy through a rate increase. MR. ANDREW M. PERKINS: Providing disability income coverage with long term renewal guarantees is like driving a car on a winding road, the benefit amount appropriate to replace income lost is changing all the time, like a road weaving back and forth. In order to avoid bad results, you want to keep your car on the road. In other words, you want to keep the benefit amount close to the amount of after-tax income the insured will lose at the time of claim, less some appropriate margin as an incentive to return to work.

With income growth and variability, inflation and changes in social benefits and other insurance, this road weaves back and forth quite a bit. Traditional, static disability income policies are like a car without a steering mechanism, they travel in a straight line. You start the car on the road, and later it may again be on the road from time to time, but only when this winding road moves back across that original straight line path.

Recent developments in disability contracts, such as residual or partial benefits, offset coverages, cost of living adjustments, guaranteed insurability, and periodic financial re-underwriting, are all improvements to help us keep on that road. By doing a better job of replacing lost income, these features should help both the insureds and the industry providing the policies.

On the other hand, if the steering mechanism becomes too complicated, it will be difficult to control properly. Neither our employees, nor the agents, nor the insureds will be enthusiastic about a product they do not understand. We have to design products which will provide the desired flexibility without becoming too complex to sell or administer. Further, simplicity is appropriate since this winding road has some width. You do not have to provide exactly the income you are trying to replace; you can be off a little in either direction.

Now, let's consider some specific issues involved in pricing these products.

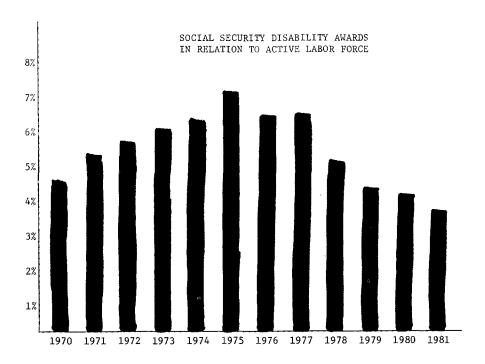
Pricing Coverages Which Coordinate With Social Insurance Programs

These are still experimental coverages, and we do not have a sufficient volume of experience to be credible. At Travelers, we recently introduced a rider which coordinates dollar-for-dollar with both Social Security and Workers' Compensation. Our first version of such a rider, issued in 1978, paid nothing if the insured received benefits from either of those two programs or from State Cash Sickness programs. In our approach to pricing, we have gone back to basics, developing estimates from frequency, duration and benefit amounts.

For frequencies, we looked at government statistics, LTD data, and used judgment to estimate the prevalence of Social Security and Workers' Compensation benefits at different durations of claim. For Social Security, we assumed a changing scale, beginning with that point when the most obvious cases would be approved (some time late in the first year), up to an ultimate point, which we chose to be at the end of two years. Because the Social Security system uses a more strict definition of disability than policies usually issued in the individual market, it is appropriate to use less than 100% frequency, even for those disabilities which last more than two years.

In the mid seventies, the Social Security Administration was lax in awarding disability benefits. Then, concerned about the financial health of the

system, they started to tighten up in the late seventies. This chart shows the resulting reduction in new awards, in relation to the labor force. Both the recent trends and the possibility that the standards for the system can change quite a bit are important considerations when pricing offset coverages.



Number of new awards for disabled workers during the calendar year, divided by the average employed labor force ages 16 and over.

Companies pricing on the basis of what was happening during the mid and early seventies might now find that their insureds are not qualifying for Social Security Disability benefits as often. We should keep in mind the possibility of future changes in either direction.

For duration, we originally assumed that social benefits, once approved, would continue as long as our disability lasted. In view of recent attempts by the Social Security Administration to tighten up their system, that may have been too liberal an assumption. The government is beginning to recognize that they should check on claimants periodically to make sure they still qualify for benefits.

Social Security benefit amounts can be estimated with reasonable accuracy for current claims. The formulas are complex, but they are manageable. It is difficult to estimate the benefits an insured might receive five or ten years from now, however, because of the possibility of changes in indexing, or benefit formulas, or in covered earnings. Thus, it is desirable to have a mechanism in the policy for changing the benefits periodically.

It is extremely important to recognize the composition of the insured population. Statistics from the Social Security Administration or other government sources would generally not be appropriate, without modifications, to the people we are insuring. Our insureds would tend to have higher incomes, more stable earnings histories and less hazardous occupations than the general population.

For example, in 1981, new Social Security disability awards for workers averaged \$473. That was only about 75% of the maximum benefit available, reflecting the fact that many of the recipients had not contributed maximum FICA taxes each year. Since many of our insureds earn at least \$30,000 per year and have probably always contributed the maximum FICA tax, we should assume something higher.

Pricing Residual and Partial Benefits

A number of companies have been writing residual benefits for a number of years, but I am not aware of any published statistics on their results. From my own company's experience and from comments I have heard from others, it seems that residual or partial disability frequencies are much lower than total disability frequencies. (That may not be true for those companies which do not require a qualifying period of total disability.) While my company's results are not credible, the early indications are that this benefit is not producing large claim costs. I suspect the full costs will not be known until the industry has had a chance to have a large number of policies persist through age 60. It seems that the most likely possibility of using these benefits comes at the oldest ages.

Pricing Cost-of-Living Adjustments

Pricing cost-of-living adjustments is relatively simple, especially if you use a fixed percent, or the cost-of-living adjustment is limited to an amount less that what you actually expect the change in the Consumer Price Index to be. However, some additional adjustments are probably appropriate to the basic claim costs, because this feature increases the replacement ratio for the policyholder, especially during the later durations. This is certainly an important and valid enhancement to disability policies during an inflationary period, such as we are in today. Companies should keep in mind the possible

affect on claim cost, especially where a fixed percent is used and the actual inflation rate falls off.

Periodic Financial Re-underwriting

Pricing a policy of this sort involves considerations of philosophy and actuarial techniques which are quite different from those of traditional policies. Attempts to use a level premium that extends beyond one term can create equity problems. Those individuals whose benefits decrease on renewal, perhaps because they have picked up other coverage, "lose" the reserve that their level premiums have built up. This could be recognized either by charging lower premiums from the very beginning, to spread the estimated savings over all insureds, or by returning some value to those particular individuals whose benefits actually decrease. Either of those approaches presents some other problems, however. The alternative is a term approach, under which no active life reserves are held at the time of each re-underwriting. In either case, renewal premiums should recognize the extra expenses associated with periodic re-underwriting: the actual expense of underwriting, expenses of changing the billing system or issuing a new contract, possible compensation to the agent or field staff, and possible extra claim expenses for investigation of claims which are contestable with respect to the financial information obtained by re-underwriting.

Pricing Options Which Guarantee the Right to Increase Coverage

Assumptions must be made about the degree of anti-selection exhibited by those insureds electing to increase their coverage. At Travelers, we have been encouraged by the high proportion of insureds eligible to increase who have actually opted to do so, recently 49%. Thus, those who do select against us are not going to have as large an impact relative to our total premium volume. That experience was on contracts or options limited to \$100 or \$200 per month, and where we were sending out notices prior to each option to inform the insured of this opportunity. Experience might be different under a different program, such as the new, more liberal options, which allow dramatic and more frequent increases in coverage.

Legislative and Regulatory Problems

Most of the significant problems in gaining approval are in the area of coverages which coordinate with social programs and other sources of insurance. Some of the states have been hesitant to approve offset coverages, based on their belief that these coverages are less favorable to the insured than the Relationship of Earnings to Insurance clause or the Insurance With Other Insurers clause in the uniform policy provisions. It may be a slow process for both an individual company and for the industry to convince an insurance department that these coverages are in the best interest of the insuring public. Progress has been made, however, and I believe it will continue. Hopefully, regulators in all states will evenutally accept the importance of disability benefits which neither overinsure nor underinsure. In fact, most jurisdictions do now approve coverages offsetting against public programs, whereas they might have more trouble with offsets against other private insurers.

Some states have placed very specific limitations or prohibitions on the types of programs which can be recognized in such an offset. New York, for example, does not allow either no-fault insurance or state cash sickness to be included. Missouri, on the other hand, prohibits the recognition of Social Security retirement benefits as an offset.

New York has generally been the state with the most specific requirements about offset coverage. While it is not part of their broad Regulation 62, they have a long list of requirements, which include such things as:

- Prohibiting dollar-for-dollar offsets, or prohibiting a situation where a company would pay the proportion of actual income lost after recognizing social benefits.
- Requiring separate renewal provisions for offset coverage, if either the renewal or the premium guarantees are different from those of the basic contract.
- Restricting (but not prohibiting) an insurer's right to require the insured to pursue social benefits.
- Disallowing offsets against no-fault or cash sickness benefits.

New Jersey, like New York, requires companies to monitor experience on the offset coverage and report the results. We may disagree with the form of these requirements, or even disagree that a state should require it at all, but certainly monitoring is something we should be doing. It is experimental coverage, and we do not really know what to expect yet.

MR. WILLIAM KOCH: My remarks will be directed primarily towards Western's income insurance policy. First, I would like to cover some of the features of this plan, which was introduced by Western Life in February of last year. It is written for a three year term; at the end of that term it is financially re-underwritten. The premium structure is three year steprated. This policy integrates with Social Security, Workmen's Compensation and other social insurance benefits, as well as insurance with other companies and actual income during a period of loss. It pays immediately when income drops below the maximum benefits subject to our normal waiting period. The policy itself has no definition of disability, it provides benefits when the insured suffers an income loss as a result of an accident or sickness and is under the care of a doctor. Total disability is never required. We also have a guaranteed insurability benefit built into the policy for larger amounts should the individual's income go up. This provides that the individual can purchase up to three times the original issue amount without evidence of insurability, subject to our regular issue and participation limits. As an optional benefit to this policy, we have a Consumer Price Index Rider which provides an increase up to 6%.

Marketing

A number of people in our company, especially in our marketing and field areas, were skeptical when this policy was first designed. For many years, we used a level premium form written either as a non-cancellable or guaranteed renewable policy. Further, we had followed the tradition of the big writers in providing a long "your occ" for preferred classes: to age 65 for our top occupational class and to age 55 or for eighty-four months for our second preferred occupation class.

While in the final stages of drafting the policy, we introduced it to our company's Communique Panel. This Panel is made up of agents from around the country, as well as a number of field representatives and field force. We spent a considerable amount of time going over the policy in detail with them and received very good comments which were incorporated into the policy.

Once the policy was filed and approved, our Marketing Department had meetings with our various field offices to introduce this new concept. Our Sales Promotional Unit did an excellent job in marketing the product. The usual brochures, as well as direct mailing pieces and rate books were developed, and in addition, several film strips were developed for our field managers to show to agents.

We introduced this policy in February of 1981, in twelve states, and we currently have approval in forty states. After the policy was introduced, we found that it took between six and eight weeks to begin receiving applications from a given area. It is a new form, a new concept, and it will not succeed without a lot of work by the field offices.

Once approval is received within a particular state, our field offices hold meetings with our agents to train them in this new concept. My overall assessment of the agents' reception to the policy is that it has been very good. Our step-rated approach, as opposed to level premiums, has been well received. This is an area where we felt that we might have some problems, especially with those agents who were used to a level premium approach provided either under a guaranteed renewable or a non-can policy. We provided the agents with comparisons of a level premium policy as opposed to step-rated, and they seemed to receive this concept well.

As to the scope of the market for this policy, we designed it for all occupational classes. When we designed this policy, we looked at the approach of a number of other companies already having a similar form available and found that, in most instances, they were limiting their policies to the two top preferred classes. It was our feeling, however, that any policy we developed should be available to all occupational classes that we had previously written. This policy was designed to complement our estate planning process, and our target market was business owners and professionals. Since the policy was introduced a little over a year ago, approximately 75% of our applications have been under the two top occupational classes, of which approximately 25% were under our preferred class which is very restricted, including only the medical profession, lawyers, and CPA's. As under most traditional policies, we made an adjustment in the dollar amount we would write depending on the occupational class and the applicant's age.

Not long after introducing the policy to our field force, we announced that we would make it available to professional associations in the preferred occupational class, and upon receiving the association's endorsement, we would allow a first year discount in the premium. Our first association endorsement came from the Minnesota Bar, which has approximately 8,000 members. In marketing this product to the members, our first approach was to send out a direct mail with a reply card that the members could return for further information. Our marketing people tell us that generally a 3% return on a mailing like this is good. At last count, ours ran about 5-1/2%. At this time, our Minnesota agents are in the process of soliciting

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members of the Minnesota Bar. About two months ago we expanded the association discount to include the top two occupational classes and also offered it to employer-employee groups of ten or more employees with a 20% participation.

Underwriting

We are doing considerably more financial underwriting for this policy than we did on the traditional type of policy. The determination of the amount of coverage an individual qualified for is based on scheduled income - that is, a combination of earned income and "perks". Each applicant's situation is different, and the financial underwriting is used to determine how much coverage each individual will be able to purchase. The calculations used in determining our replacement ratio or the amount we will issue is based on factors which represent the client's occupational class and scheduled income. There are four factors to be considered in determining our maximum benefit:

- (1) Tax Adjustment. This factor considers the type of income tax the client pays, and whether he files a single or joint return. Applicants who file a joint return will be allowed to purchase more because their spendable income is typically slightly higher than the client who files a separate return.
- (2) Employer Paid Premium Adjustment. This factor considers the taxability of benefits that the insured would receive at the time of loss. Because benefits purchased by the employer would be considered taxable income when received, the factor allows a higher amount to compensate for the taxation of the benefits. This adjustment adds to the amount of coverage.
- (3) Dual Income Adjustment. This factor considers the amount of income earned by the working spouse, which may contribute substantially to the client's standard of living, and assumes the spouse will continue working. This adjustment tends to reduce the amount of coverage that the client will be able to purchase.
- (4) Unearned Income Adjustment. This is an adjustment that most companies have made for years, even under traditional policies. Where there is substantial unearned income that would continue if the individual was disabled, we will reduce the amount that we will write.

A combination of the four factors will determine the actual amount we feel an individual will qualify for. In addition to the normal application, the applicant must also complete a financial data sheet. This financial data sheet was filed and is made a part of the policy.

From the financial data sheet we develop monthly income used to determine the replacement ratio. The financial data sheet also includes the net worth of the applicant. Generally, if the net worth exceeds one million dollars, we will not provide coverage. In addition, we require an inspection report on all applications. We use our own personal history interview for lower amounts and use the commercial inspection for the larger amounts. Our maximum issue limit can be higher than the traditional DI policy because of the offsets for other coverage and social insurance.

In determining the amount of insurance an applicant qualifies for, this method has allowed us generally to write about 15% to 20% more for an individual on a given income than was available on other similar policies or through the traditional type of disability plans. This method does not take into account, at the time of underwriting, that an insured may receive, at a later date, Social Security or Workers' Compensation. The amount of insurance written is based primarily on the applicant's tax bracket. Other income insurance we have seen takes Workers' Compensation and Social Security into account at the time of underwriting, and therefore, an offset such as 60% minus \$500 or \$600 is used. These companies will generally offer an additional amount under a Social Security rider.

In determining the benefits based on the tax status only, consideration of benefits received from Social Security or Workers' Compensation is not given until the time of claim, and then only if the insured is eligible and is receiving the benefits. Benefits paid under this policy would then be coordinated with Workers' Compensation and/or Social Security.

In our market, farmers represent a large volume of business, and we have designed two additional financial forms to be completed along with the farm application. One is a special income sheet which was designed from the 1040F form that the farmer completes with his tax return. The second is a more detailed net worth form. The special income form was designed because in many instances high depreciation would result in an income that would appear not to justify providing coverage. Where there is an unusually high depreciation or farm deduction shown, individual consideration is given, and we have found that in most instances we have been above to provide some coverage.

Most companies follow basically the same underwriting rules for medical underwriting as they would use on the traditional policy. Generally speaking, we are following the same medical underwriting rules that we had used previously.

To the best of my knowledge, Western is one of the few companies today that does renewal underwriting. The policy was designed to be written for a term of three years. At the end of the three year term, a letter is sent to the insureds along with a new financial data sheet. This financial data sheet will be reviewed and will determine whether the insured qualifies for the benefits he currently has or if he qualifies for additional benefits. If he qualifies for additional benefits, an offer will be made, and he will be advised of the guaranteed insurability benefits. Should his income have gone down, we have the right, on renewal, to (1) reduce the benefit that he had, or (2) cancel the policy if he does not qualify for our minimum. If the insured refuses to furnish us with a financial data sheet at the time of renewal underwriting, the company has the right to cancel the policy.

We also offer an optional benefit, a Consumer Price Index Adjustment Rider. The CPI factor represents the percentage increase in the CPI from the time the policy began paying a monthly benefit. It will never be less than the original calculated amount, even if the CPI drops. It appears that the majority of companies provide this benefit with a factor limit ranging from 6% to 8%. This means that on a long term disability, the CPI rider could double the insured's benefit amount. Some companies apply the increase to the gross benefit amount before the offsets. This latter method will, in some cases, actually provide a net benefit increase in excess of the 6% or 8%.

MR. PERKINS:

Claim Administration

An important consideration in claim administration is simplicity. Claim administration can be very complex, especially with residual benefits and indexed pre-disability earnings, and it would be easy for the claim staff to make mistakes. Certainly it is desirable to use data processing equipment.

The success of claim administration for coverage which offsets against public insurance programs depends on the insurance company's ability to get the claimant to file for and obtain the social insurance benefit. When an insured is disabled, there is not any requirement by the government to file for Social Security benefits. If there is no incentive for him or her to do so, it will not happen, since the application process can be complicated and difficult. An insurer can help create incentives to file for these benefits by issuing an amount of coverage that is slightly less than what the cliamant will be receiving from the social program. The effectiveness of that design will be limited, however, even with periodic financial underwriting. We cannot predict the amount of social benefits with complete accuracy. It is advisable to put language in the contract requiring the insured to pursue social benefits. It is reasonable to do so, and it is reasonable to ask for proof from the insured that he or she filed. Companies may also improve their experience if they work with the insured in filing for the social benefit.

MR. SPIES: At this point, we would like to get into a short round-robin discussion with the panelists to cover the balance of the discussion topics. First of all, we would like to have them consider the question of sales. Even the best designed policy in the world is nothing more than a theoretical exercise unless it sells. Do any of the panelists have comments regarding the recent sales results for this type of product?

MR. KOCH: Sales start slowly. I talked to about five other companies, and they all said that the first year sales were slow, but after about two years, sales started climbing and good results were shown. From our own experience, it appears we will have similar results. Each month the volume increases, however.

MR. PERKINS: I have a few comments regarding our optional rider which offsets against social programs. We have been issuing it for about four years, and it appears to be very popular. That may be because we have encouraged the agents to sell it, but we find that three-fourths of the applicants among the more hazardous classes do opt for the coverage, and two-thirds of the less hazardous classes refuse to buy it.

MR. SPIES: Would anyone care to comment regarding recent loss experience?

MR. KOCH: Through March, we had paid out one month's benefits to one claimant under the policy, although it had been on the market for thirteen months.

MR. PERKINS: Our experience has jumped around somewhat. We have been issuing our most modern generation of disability policies since 1978. 1979 and 1980 were good years; 1981 was slightly worse. One problem area has been social benefit riders which coordinate with social programs. Our claims people found that the language was not tough enough for them to require applications for social benefits, and as a result, we were paying somewhat more than we had expected to.

MR. SPIES: Is this product really the "state of the art" in disability insurance, or is it a passing fad? I would like to hear some comments regarding future trends for this type of product.

MR. KOCH: I have attended the Health Insurance Association's Disability Insurance Training Council meeting each Spring. A year ago there was an hour devoted to income insurance and really not a lot of reaction. At the last session, about six or seven hours were devoted to it. Charlie Habeck of Milliman & Robertson, Inc. did an excellent job covering about four different policies that were on the market. The interest had increased considerably in that one year's time, and I believe it will continue.

MR. MILLER: I am very concerned about the residual benefit. I cannot tell you how to price it, I do not know who can, but I can point out some possible pitfalls. First, you do not have to include a residual benefit in this type of policy, although it appears to be in most income replacement policies. The concern that I have had about this from its very first introduction is the fact that the real impact will not come until you have a high proportion of insureds in their 50's and 60's. To have a claim, you must have a chronic disability. When you consider the people who have been insured under any type of residual benefit, up to date, the effects of medical selection or individual underwriting are still present. Thus, the people with imminent claims have already been ruled out. These people were primarily underwritten at age 35 to 45, and by the time they are 55, many of them will have elevated blood pressure, arthritis, etc. Then you will have a large exposure to the risk of the residual. I also feel the big impact will come at this higher age group since the residual offers the possibility of being used and abused as an early retirement benefit. The motivation to seek this will be much higher among people who are age 55 to 60. Many of them might be able to retire on their company pension plan, and the incentive to add a little more through the residual clause would be tremendous.

Consider a person age 55, insured at \$4,000 monthly income, who thinks he or she might be able to establish a 50% disability and continue to earn 50% after six months of full disability. The total income, on the 50% basis, would be about \$228,000 up to age 65, which is quite an inducement. The residual clauses, with very few exceptions, cover two situations; first, the person who is forced or induced by his disability to pursue another occupatioh, and second, the individual who reduces his time in his present occupation. From the standpoint of need, you can say that they are indentical and they should be treated identically, which seems to be the judgment that most of the insurers have made, but from the standpoint of underwriting, there is a vast difference.

I mentioned the British experience and their PHI policy earlier. It is incumbent upon us to consider what they are doing. The British for many years incorporated in their policy what they call a proportionate disability benefit, which says, if by reason of your disability, you are forced to change your occupation, then you will get a proportionate income based on your new earnings in your new occupation. This is Part 1 of the U.S. residual benefit. They do not say anything about reducing your income from your present regular occupation, but they generally limit the benefits to twelve months or some fairly short period. So they have recognized intuitively, if not otherwise, that there is a hazard which they are avoiding.

Returning to the idea that this benefit has a long fuse. I have a hypothetical calculation to illustrate the accumulation of insureds with current or past chronic disease from an initial body of select lives. I have tried to indicate the build up of the impaired risk among the original select group. I did not include a lapse rate which, of course, would be very important. While the actual magnitude of these figures may vary, I suggest that if you are concerned about the ultimate cost of the residual, you should make your own projection using appropriate assumptions. This shows that for the age group 55 to 64, among the total insured population, over 7% will be currently totally disabled from conditions conducive to the residual chronic disabilities. Those include diseases of the mental and nervous sytems, sense organs, musculo-skelletal, circulatory, respiratory, digestive, skin and subcutaneous systems. The largest omission from that list is accident and other acts of violence. In addition to the 7% disabled from these "chronic" cases, there will be a little over 1% who have had such disability and recovered. They are, of course, potential candidates for a new or recurrent claim.

I recently received a Report on the 1978 Social Security Survey of Disabled Workers. This showed by decennial groups the percent of the U.S. population working age adults who are receiving Social Security DI benefits. This was 7.1%, almost exactly the percentage that I developed. This report also shows people who are not receiving DI benefits, but who are severely disabled, and occupationally disabled. These partial disabilities and the severely disabled, reduced for what I have called the chronic or conducive causes, comes out to 8% at age 55 to 64. Thus, in addition to the 7% currently disabled, there is another 8% that are severely disabled, but not sufficiently to receive a Social Security award. So, among the policyholders in their last decade before 65, you may have 7% disabled, 1% recovered, and 8% not disabled under the Social Security definition, but nevertheless severely disabled. They would certainly be candidates for the residual benefit. My calculation also shows that at age 37 you have only developed 2.9% of the disabilities that will have emerged by age 64, which certainly confirms Andy Perkins' comment that the current or recent claim experience may not be very pertinent. You are looking at a very small tip of the iceberg, and it is not until you get above age 50 that an appreciable percentage of the insured population shows some impairment, if not actual current total disability. This will ultimately look like a very different group from those currently insured on a benefit which has only been issued for the past one to five years.

MR. PERKINS: The current changes that we are seeing in contracts are not a temporary phenomenon. I expect companies will continue to look for innovative ways to improve their accuracy in replacing lost income with what may be increasingly involved policy mechanisms. I expect the state insurance departments to gradually become more willing to approve innovative approaches. Hopefully, also, our data processing capabilities will enable us to better handle this sort of policy. The only scenario under which I would expect a reversion to a more traditional basic total disability type of contract would be if we have made serious mistakes in pricing or evaluating the risks.

MR. SPIES: It would be especially wise in this type of product to remain under a guaranteed renewable form so that you can change premiums if you start having bad claim experience. Non-can would not be advisable. Western Life's policy is a cross between non-can and guaranteed renewable - it is non-can only for each three year term period; for repeated term periods, it becomes a guaranteed renewable product.

At this point, I would like to open up the discussion to audience participation. Do any of you have questions that you would like to ask the panelists?

MR. RICHARD L. MUCCI: I have a question for Bill Koch and Bob Spies regarding Western Life's policy. What do you anticipate the lapse experience is going to be on this policy at renewal time? It seems that there will be a "double wammy" to the insured. The typical insured's income will have gone up, he will have more insurance to buy, and it will be at a higher attained age rate. Do you anticipate any lapse problems at the renewal date?

MR. KOCH: I do not believe so. In comparing our rates with non-can rates, twelve years or fourteen years elapse before they cross over. So, even with an increase in amount, the premium would likely still be considerably less than what the insured could purchase under a conventional policy. I do not anticipate that we are going to suffer, but the answer will only come about two years from now, when we start seeing actual experience. We talked about this when the product was being developed, but I think that Bob will concur that we do not feel there will be a problem.

MR. SPIES: No, not a great problem. The actuarial assumptions for pricing reflect that an additional 20% would not renew beyond the normal stream of lapse patterns, i.e., an additional 20% would not renew every third year.

MR. MUCCI: With your normal lapse assumption for that third policy year, for example, are you tacking on 20% lapse on top of the 10% lapse?

MR. SPIES: For the top two occupational classes, we have a third year lapse assumption ranging from 7% to 12% as the normal. In the lower classes, that third year lapse assumption ranges from 9% to 15%. Another 20\% is added on top of that. That is, we multiply these lapse rates by a factor of 120%.

MR. MUCCI: Am I correct that your policy is an income replacement type policy which does not mention the word "disability" in the policy? Do you anticipate any problems in insuring the farmer market? Because their income is seasonal, it would seem that it would be difficult to determine disability during those periods when the farmer's income is not coming in.

MR. KOCH: Disability is not mentioned in the policy. The farmer market was discussed extensively. We have a special endorsement which states that, at the time of loss, benefits are based on prior income times the replacement ratio. Prior income, at the time of loss, is the highest of (1) the amount shown on the financial data sheet, (2) the average over the last twelve months and (3) the last tax return. On the farmer's policy we recognized that there can be a problem. First of all, the dollar amount we write on farmers is considerably lower than on the other classes. Also, we have downward adjustments in the replacement ratio, unless there is a long waiting period, i.e., 180 or 365 days. So we are writing a lesser amount,

but there is no question that there can be a problem with insuring farmers in any type of disability.

MR. EARL L. HOFFMAN: I have a question for Andy Perkins. Considering the pricing of the social insurance supplement, in the dollar for dollar version, do you make any distinction in your pricing or in your issue limit for individuals who clearly can only qualify for the primary insurance amount, that is, single people, childless couples, older couples?

MR. PERKINS: We reflect that in the issue limits, which is admittedly an imperfect mechanism. Our issue and participation table has different limits for those individuals who would qualify at time of issue for family benefits, as opposed to those people who would qualify only for the primary insurance amount on a current claim. We do not vary either the expected frequency or duration, and even for benefit amount, it does not come through in the pricing.

MR. SPIES: I would like to ask a question regarding reinsurance. With a new concept, the reinsurers tend to get a little nervous. Has anybody experienced any major problems in obtaining reinsurance for this coverage?

MR. KOCH: We had no problem other than the fact that we wanted have a higher issue limit than we were able to obtain. However, after we had the policy out about six months, we were able to pick up another \$1,000 on it. Our issue limit, incidentally, is \$7,000 a month, and we had no problem obtaining reinsurance. We have had calls from three or four other companies that were interested in our taking a look at their quotes for reinsurance. I do not think that anybody has run into any problem on it.

MR. PERKINS: We have not found problems either. It appears that the reinsurance market for disability is following the benefit changes that are being made by the direct writers fairly closely.

MR. WILLIAM SONNLEITNER: I have a question for Mr. Koch or Mr. Spies about the Western Life discount for the employer/employee market. What is the approximate level, and what is the basis for the discount?

MR. SPIES: The discount is 10% for the first year.

MR. SONNLEITNER: What is the basis for that, lower commissions or greater persistency?

MR. KOCH: Endorsement by the Association is the reason you give them the discount. As I mentioned, we have a letter of endorsement, for example, from the President of the Insurance Committee of the Minnesota Bar. Under their letterhead this endorsement is sent along with our direct mail piece to all members of the bar, and on the basis of their endorsement we give the 10% discount.

MR. SONNLEITNER: Does that come out of your profit, or does it come out of greater persistency, or lower commissions?

MR. SPIES: There were a couple of things on the actuarial side that we assumed for this discount. We would, as you mentioned, expect somewhat better persistency from this group, although note it is only a first year discount. Also, we would hope that the agent will be willing to take slightly less compensation. His compensation is based on the 90% premium. Presumably, he will have to do less work on the sale, since the Association has given their approval of this concept.

MR. SONNLEITNER: Have you seen any problems in selling this guaranteed renewable policy to the professional groups, professional occupations?

MR. SPIES: We have not had much negative feedback about that. When the agents were discussing this concept, they did raise the loss of the non-can, the fact that the non-can only goes for each three year term. However, our Marketing Department did a very good job presenting this. They showed them all of the benefits this policy has, the low step-rate premiums compared to the typical level premium concept. I think that was the big clincher. The market is very price conscious these days. It is apparently becoming more difficult to make a sale, and if they can show a large price savings to the professionals, they can get them to buy that concept.

We are writing a lot of this coverage along with other inforce coverages. For example, an individual may have had other coverage inforce for four or five years, generally a non-can to age 65. You know they are not going to drop that, but with our replacement ratio, we are able to issue, say 15% to 20% more. We find a lot is being written this way. We do find it replacing other insurance, but a lot is being used to supplement existing insurance. Our policy tends to have higher issue limits than the standard traditional policy, and therefore, it is a natural for the add-on, since we do coordinate with other coverages. Where maybe the individual qualified for \$4,000 under a traditional policy, here maybe we can give him another \$1,500 to \$2,000. We have seen this with the Minnesota Bar Association, which endorses Mutual of Omaha as their Group plan. We are replacing some, not a lot; but we are able to add-on sale, to fill the gaps.

MR. SPIES: I would like to ask the panelists what they feel are management considerations for getting into this type of a product? Some of you may be interested in pursuing income insurance for your particular company. What things should you really be considering from a management point of view before you take the plunge?

MR. MILLER: I would suggest that Andy covered it when he talked about monitoring. However good your current statistics may be, your statistical base management should try to make it even better. One thing I have become quite impressed with is the significance of diagnosis. Not many companies code their claims by diagnosis, but I believe a great deal can be learned by doing so, and I do not believe the cost would be very great.

I feel my comments so far may have seemed critical of the industry. Five or six years ago the loss ratios had risen alarmingly, and people were waking up to the fact that Social Security disability benefits could no longer be ignored. Initially, they were trivial. They crept up very slowly, but with the 1972 indexing provisions they really escalated, and eventually companies saw the problems. This had two aspects, one was the matter of overinsurance, and companies began to take this into account. The other was the matter of the gaps in the Social Security benefits. When the benefits got up to \$1,000 a month, then the first six months, i.e., the fifth or sixth to the twelfth month, where you were not quite sure whether there would be a benefit or not, became very important. Companies began as far as five years ago to develop and offer Social Security supplements. I think that was really the first step toward this current policy. Only a few years ago the general feeling was that anything approaching a COB approach, anything like the group LTD complete integration, could not be written under existing laws. However, many advocated doing it by a yearly rewritten policy, if necessary. Obviously, a lot of people did a lot of thinking and a lot of educating in the Insurance Departments. What seemed such a short time ago to be an impossibility is here, with almost complete acceptance in all the fifty states. I think it is really a remarkable achievement. If any of you, as I am sure you did, had a part in that, I congratulate you.

MR. PERKINS: If you are talking about getting into disability income for the first time, I think an important management consideration is that it is a commitment of much more than product development. To succeed and not damage your company financially, you have to be willing to put a lot of resources into the sales, underwriting, and claim administration. A lot of people have to become knowledgeable and do a good job. Even if you are just talking about changing to one of the newer income replacement type policies, it is a big education process. How you do will be affected more by how well all those people working for you know the product and know their job, than by whether you develop a good product and a good price.

MR. SPIES: In closing, I would like each panelist to give his personal reaction to the product. Put aside your role as a professional in the disability insurance business, and on a personal level, give us your response regarding this product as a consumer. Would you buy the product yourself?

MR. PERKINS: I believe I would, especially if it is available at a good price. It makes sense.

MR. MILLER: I would certainly buy it, especially with a residual clause. I could then plan to retire five or ten years earlier than I otherwise would. I think it is a great product, a real achievement, but I do worry about the residual part.

MR. KOCH: If you had asked me this when we were developing the policy, I would have said no, I prefer the old policy. It took me a long time, after about twenty years with the conventional policy, to see the light. However, since we introduced it in the last year and a half, without question I would buy the income insurance, based on price, as well as overall concept.

MR. SPIES: I would agree with the three panelists. If it were not for my group insurance disability coverage, I would buy this particular coverage myself.