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DESIGN OF INDIVIDUAL DISABILITY PRODUCTS

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- o Design features of business coverage compared to personal coverage
- o New developments in income replacements, residual, own occupation and cost of living benefits
- o Effects of recent experience on design
- o Outlook for future

MR. DAVID W. LIBBEY: I am David Libbey, a disability income actuary from the Paul Revere Insurance Company and I'd like to take a moment to introduce the panelists. Gerald Fryer is with Canada Life Assurance Company, Robert Beal is with Unionmutual Life Insurance Company. Monte Hopper is with Connecticut Mutual Life Insurance Company and Charles DeWeese is with Tillinghast, Nelson and Warren in Hartford, Connecticut.

I'd like to briefly mention the topics they will be discussing this morning. They will be talking about design features of business coverages, as opposed to personal lines. They will describe some new developments in income replacement, residual, own-occupation and cost of living features and will comment on the impact of recent experiences in product design. Finally they will talk a little bit about what we might see in the future.

MR. CHARLES DEWEESE: Most of my background has been in the group health area, but I've recently gotten involved in individual disability income situations. The thing I've noticed most in this is that the basic trend is toward benefit liberalization. There are a few leaders who keep coming up with these new ideas, and everybody follows. People keep saying "Gee, I don't know if we should do this," but they keep doing it anyway. It reminds me of the time I went to breakfast before another one of these Society meetings. The maitre'd was very nicely dressed, very efficient looking. He said: "Follow me Sir," then turned around and walked right into a post. I was faced with the dilemma that

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a lot of disability income writers are faced with now. I could follow this guy and get my nose bumped, or I could ignore him completely and wouldn't get any breakfast. I'm not sure how that ought to be solved, but it's a difficult problem that a number of my clients are wrestling with.

Many of my clients are interested in the disability income market, because they see it as a good opportunity for new products and financial profit. For every hundred life insurance applications these companies get, they receive somewhere between three and ten disability coverage applications. Market penetration does not appear to be very great at this point. Most of the effort of the leading carriers has focused on a relatively small segment of the potential market. That's the professional occupational classes.

Companies also see disability income as a profit opportunity since the claims experience has been very favorable and stable over the last several years. Most of the products appear to have rather subtle differences, and that has made direct price comparisons difficult. To some extent, that has protected the profitability of these products because the price is not as naked as it is on some other kinds of coverage. The differences in products, though, are becoming fewer and less important. That's creating more focus on the price element. There is a lot of price competition on quasi group situations or franchise situations where individual disability products are sold with fairly deep discounts, typically along with lower commissions.

Disability income is an interesting product and it's the only product that I've been involved with where the contract wording is very often the most important marketing feature. Many of the changes that have been made recently in disability income insurance seemed rather subtle to me when I first learned about them, but very often they represent a change in the insurer's approach. Up until recently, what I knew about disability income insurance was what I learned about it for the Society's exams fifteen years ago. What I learned then was that underwriting disability income coverage was to be guided by general underwriting principles. The product design would respond to what insurers felt was responsible and, once you had that responsible product design, people would buy it. Those characteristics of product design were:

- o Income replacement ratios were very strictly controlled.
- o Maximum benefit levels were set low enough to encourage people to return to work.
- o Replacement ratios declined by increasing income size, and rather dramatically too.
- o If benefits for partial disability were allowed, a qualification period of total disability had to be met first. That was in order to keep people from using the coverage as a vehicle for early retirement.
- o Coverages for occupational classes were limited.

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- o During the 1970s, when inflation was high, underwriters could use the CPI and increases in the social insurance levels to reduce long-term benefits in amount and value.
- o Benefits were written for a limited period.
- o The definition of disability was very restrictive.

Since then, insurers discovered the professional market. This is a very attractive market because professionals are most often in business for themselves, or working in corporations with other professionals, and have not had much access to traditional group disability benefits.

These people have sufficiently high incomes to buy disability coverage and Social Security benefits do not pay a very high proportion of their current incomes. In many cases, Social Security doesn't even apply to these people because it is so difficult to meet the government's definition of disability. They have a demonstrable need for high income because they earn a lot, they spend a lot and have many commitments. And, they are very motivated by security. They are generally perceived as very good risks. Their experience has been very good because they have a high level of work satisfaction, a strong work ethic and are very employable. They are not particularly vulnerable to economic downturns in the way that members of other occupational classes are. They are not subject to job hazards, and don't have very physically demanding responsibilities. Even if they have some kind of physical disability, they very often can continue their current employment.

The problem is that these people's needs are not met by the older product. Some of the needs are real, and some perceived, but those are very effective in shaping the kind of products these people want. In particular, because a self-employed professional person is responsible for his or her own retirement income, and many of these people plan to continue to work past the normal retirement age, they either need a high enough level of disability income to be able to put something away for retirement, or they need disability benefits that continue past normal working age.

Many professionals are also specialists and earn very high incomes in specific occupations. If they are disabled and cannot pursue their occupation, their earning power is drastically reduced. Even if they can maintain activity in their occupation, the effect of reduced involvement on their incomes could be very drastic. Thus they need access to some kind of partial benefits.

They are very heavily motivated by security, and most of them want disability coverage that is noncancellable and guaranteed renewable. They also want inflation protection in their disability benefits. I'll sum this up by saying that what they are really interested in is not so much health insurance but income protection.

The favorable profit environment, along with these market pressures, has brought response from the major disability income writers. The most common benefit design in this market now is own-occupation for

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the full duration of benefits. Benefits are available to age 65, with riders for lifetime extensions. Coverage offered to these groups is noncancellable to age 65 with options to renew to age 70 or 75 at the rates then in effect. Coordination with social insurance is generally covered by a separate rider which specifies payment to be made in the event social insurance does not. In general, the writers of disability income, particularly in the professional market, assume that social insurance will not pay. Very often it is the case that someone who qualifies for disability income under the terms of the individual disability products in the professional market will not get Social Security disability benefits.

Partial disability benefits are now covered through what is known as a zero-day residual feature. The old definition of residual benefits applied to a lingering partial disability that was left over after a period of total disability. Now most of the contracts do not require that total disability benefits be paid before paying these residual benefits. There is quite a bit of debate over how much residual benefits cost. What I find is that many insurers see this as a cost savings option. They may be able to pay partial benefits to some people who would not otherwise be motivated to work and who might be eligible for full benefits.

Another important feature of today's products is the cost-of-living riders. One company I talked to estimates that 60 percent of what they write has indexed benefits. Some of these cost-of-living benefits were designed in the higher inflation environment of a year or two ago, and they provide for a fairly high level of benefit increases; they are also quite expensive. One company offers a 7 percent increase annually up to two times the original benefit. Another company has benefits indexed to the consumer price index (CPI) up to a maximum of between 5 and 10 percent at the policyholder's option, at different costs depending on the benefit chosen. Yet another company indexes to the CPI with a minimum of 7 percent simple annual increase and a maximum of 10 percent on a compound basis.

What this tells me is that if the CPI were to decrease or were to continue to remain at a low level, benefits in many plans might increase anyway and that's a dangerous thing. Some plans are set up so that the benefits would not increase on a guaranteed basis, that is, if the CPI were to go down, the benefits would go down too.

A related issue is guaranteed insurability in that the indexed benefit values generally apply after the policyholder becomes disabled; guaranteed insurability would provide for increases in benefits before becoming disabled. If a plan has one feature and not the other, a situation is created where someone might be disabled and get benefit increases, then recover and be eligible for the lower level of benefits that applied before becoming disabled. At least one company has a provision that a disabled person who recovers can buy an additional amount of insurance to provide the benefits he was receiving under the disability indexing provision.

Other companies extend guaranteed insurability to existing policyholders, providing for increases in benefit amount either on demand or

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on the basis of financial underwriting. Many of these guarantees offer options for increased benefits every three years with a sixty or ninety day period in which to make the selection. But some companies have found that every three years may not be often enough for some people, particularly young professionals whose incomes are rising rapidly. So some companies have liberalized the option period, particularly to avoid having coverage lapse when a person needs an increase and is not eligible under the terms of the option offer.

The business market has also undergone a liberalization of benefit design. The major kinds of policies sold are business overhead expense, buy/sell coverage and keyman insurance. Business overhead expense coverage is relatively short term. The benefit period is usually one or two years, and is designed to pay the expenses of running a business during the disability of the owner. Because the income need is related to operating expenses, some insurers have felt that it was better not to have contracts that are noncancellable and guaranteed renewable to age 65, since those features might outlive the business. But the trend does seem to be towards the noncancellable coverage because that's what people want. Partial disability benefits are usually available in connection with these contracts, but that's generally for a shorter time.

Some of the changes that have occurred in the business overhead market involve the definition of expenses that would qualify. Newly qualifying items are the principal portion of mortgage payments (it used to be that only the interest portion was eligible) and the cost of temporary help to take the place of the disabled person in running the business. Another development is the extension of the benefit period if the maximum benefits are not paid within the contractual period.

Buy/sell coverage generally has a longer waiting period such as one or two years. This provides funds to buy out a disabled business partner. It's very similar to life insurance buy/sell coverage and the amount is tied to the value of the business. This amount might be payable as a lump sum or might be structured on periodic payment basis. The usual underwriting rule of thumb is to set the disability coverage at 75 to 80 percent of the agreed upon purchase price. As usual, the agents like to see 100 percent, but I don't know if anyone is doing that now. The most difficult underwriting problem here is making sure that the business is valued properly. The amounts on this kind of coverage can be so large that this product has no relationship to personal disability income in terms of the risk level. The maximum amount might be as high as half a million per person. While it's very risky, this coverage does represent quite an opportunity because life insurance is sold much more often and for higher amounts in buy/sell situations than disability coverage, even though the risk to the insured is virtually the same.

Keyman insurance is a related product, sometimes used as a rider to business overhead expense. It provides for payment of profits lost in the event of disability of the key employee or for the cost of hiring a replacement. A usual limitation on this is that the replacement not be a close relative, but even that is being softened in some policies.

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In the futures, we may see a trend toward some increased restrictions --at least people are talking about that. I don't know if they will ever do it. A cause for concern is that oversupplies of at least some kinds of professionals are becoming apparent. There is certainly an oversupply of dentists in many areas of the country, and there may be an oversupply of physicians in the near future too. This may make the professional market a little bit less attractive. Some of them are facing declining incomes or inability to earn an income, and won't be as insurable as they are now.

There may be some further liberalization of covered expenses, for example, it may become a trend to use disability income to fund individual retirement accounts (IRAs) or pension contributions. Another possible trend, and this is something that is happening to some extent already, is that insurers will apply what they've learned about product design in the professional market to liberalize coverage for people in other occupations. Several companies that I have talked to are offering coverage for higher earning blue collar people that's similar to what has been sold to white collar people. They are using income splits as opposed to strict occupational splits--particularly for self-employed blue collar people who are seen as a different kind of professional. As inflation is dropping, companies may be more careful about tying cost-of-living increases to an index like the CPI. In the future, some companies may find it prudent to reduce or eliminate guaranteed increases in this benefit.

The most important trend is that the policies will continue to look more like each other, and to be more liberal than would have been thought prudent a few years ago. This may mean that the market is ready for significant innovation right now, but the form of that innovation is not yet apparent to me.

MR. MONTE HOPPER: I've worked on the design and marketing of individual and disability income products, on and off, for the past twenty years. At no time have I seen such a frantic rush to develop and enhance products as I've seen in these last two years. In the home offices of my company, there is a great deal of concern about the potential profitability or lack of profitability of disability income. But I will discuss these concerns later on. The first item on the program has to do with business insurance coverages. I'm not an expert on business disability insurance, but I can say a few words.

I remember, a few years ago, Mr. Bill Welch from Connecticut General Insurance Company told me that a company heavily involved in the business market must have a disability buy-out plan, a keyman plan and a business overhead plan in its portfolio. Otherwise, a company cannot be seriously considered as being in the disability income business. Today, I still hear that from our agents because we have neither a buy-out plan nor a keyman plan, but we do have disability business overhead coverage. Actually, I doubt that the number of companies today that have a buy-out plan or a keyman plan is any greater than it was fifteen years ago, and the business overhead policy is almost universal.

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Allan Checkoway, in his book, Disability Income Insurance, A How To Guide to Sales, quotes the U.S. Department of Commerce survey on the finding that 90 percent of all businesses in the U.S. employ less than twenty people, 57 percent employ between three and five people, and the sole proprietor is the single largest market to approach with a business disability presentation. Yet few of these businesses have business disability insurance. According to Checkoway, the reason is that they have never been asked to purchase it. Business overhead coverage, as it is now being marketed by many companies, has evolved into a very appropriate and attractive product. Most companies now offer several waiting and benefit periods up to twenty-four months. Many companies have added short-term partial disability benefits and much needed guaranteed insurability benefits. Others cover expenses incurred shortly after death. The typical definition of disability is own-occupation. Each of these appears to serve a need heretofore lacking in business overhead coverage. This situation is quite contrary to the trend in personal disability coverage. At my company, the business overhead line is not a very big seller--something less than 10 percent of individual disability business comes from this product.

Life insurance buy-out products have been widely used and continue to be used in partnerships and closely-held corporations. Yet disability buy-out is little used. This is a major oversight. The typical disability buy-out plan will have a one or two year waiting period and provide either an installment or lump-sum benefit. The long waiting period is necessary not only to hold down the cost but because of the need to delay the buy-out process until the insured has had maximum opportunity to recover. The lump-sum pay-out method would seem to be preferred from the buyer's viewpoint. I suspect the reason we see installment plans is the company's concern for abuse. A presumptive disability clause would appear to be a necessity if a company intends to market an installment pay-out plan.

If disability buy-out is a rarity, keyman coverage is even more so. But in partnerships or in professional corporations the loss of one of the principals can wreak havoc on the organization. In many instances, the principals are specialists and cannot be easily replaced. The value of the organization can be drastically diminished with a severe disability. Keyman coverage is the most logical answer. One of the items shown in the program is a comparison of business and personal disability coverages. I would have to characterize currently sold business coverages as basic, needed benefits. Personal disability coverages, unfortunately, are reaching into the realm of gimmickry with little resemblance to what is needed.

It has been my opinion for a long time that "selling to the need" is the best long-term approach in disability income, both from the customer's viewpoint and the company's. In the past fifteen years we have developed several benefits that have been very appropriate. I'll mention a few of these:

1. Residual Disability Benefits: Long-term residual benefits combined with short-term partial disability benefits have been the most significant design developments in recent years. It's virtually a

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necessity now that a policy have some form of loss of income or partial disability benefit. Originally the fear was that the long-term residual would present an early retirement opportunity that would be hard for vast hordes of policyholders to resist. If anything, the opposite is true. We are beginning to see indications that, instead of prolonging disability, the presence of a residual benefit may indeed be shortening the period of total disability so that the claim costs are no greater than, and perhaps less than, a policy with total disability only.

2. Guaranteed Insurability Benefits: Of equal importance to the residual benefit is the expansion of the guaranteed insurability benefit. When my company introduced a policy in 1979, it had built-in, annual, guaranteed insurability options for very substantial amounts and was available to age 55. We were standing practically alone, but the professional market ate it up. The swing in our business to the top occupational class has been so dramatic, largely because of that policy, that 70 percent of our business is being written in the top 4A occupational class. And the experience has been excellent. Now, many other companies are offering annual options, and those to at least age 50. This has been a much needed and desirable trend in my opinion.
3. Rehabilitation Benefits: Rehabilitation benefits have also been expanded in recent years. While most companies have not really paid that much in rehabilitation benefits, the presence of such benefits speaks to the need and the desire to return our claimants to productive employment. We're doing the right thing.
4. Cost-of-Living Benefits: Another desirable and needed benefit to be developed has been the cost-of-living adjustment benefit. But as I will mention later on, this has gotten somewhat out of hand into the realm of absurdity.
5. Back-to-Work Benefits: A few companies are now offering to pay an insured a short-term back-to-work benefit if he or she is still suffering a residual disability but has no income loss. I view this benefit as one more way of encouraging the claimant to return to work.
6. Automatic Increases: A few companies are now offering to increase the amount of coverage by a certain percentage during the first three or so policy years. The increases may not, in fact, be entirely justified, but they do help address one of the biggest problems we have today in the individual disability income market--replacements.
7. Extension of Product Enhancements: Also addressing the replacement problem is the practice of automatically extending enhancements that carry little or no cost to existing policyholders. It is good to see that some of our stock company brethren are taking tips from the stodgy old mutuals.

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8. Accumulation of Waiting Periods and Recurring Disability: Another trend is to permit the satisfaction of the waiting period with accumulated periods of total, residual and partial disability. And, to permit the claimant to flip-flop from total, residual and partial disability in defining a recurring disability.
9. Group Wrap-Around Benefit: One of the new benefits that we developed in my company is what we refer to as the "wrap around" benefit. Basically, this is a residual disability rider that's attached to a small base policy that is used in situations where the group long term disability (LTD) plan does not include a residual or a long-term rehabilitation benefit. The residual benefit has a one year waiting period and as you can imagine, the wrap-around benefit is quite inexpensive, but it does serve a valuable need. Many of our idealistic agents dream of the day that they can write a large group of employees using individual disability income products. They quickly realize, however, that the cost of individual policies versus group LTD is prohibitive. The next best thing is to supplement the LTD plan with some form of a wrap-around benefit on an individual basis. This way, the agent can gain entry to the group of employees and perhaps find a market for individual life insurance, annuities or other financial products. Our producers have been quite pleased with the opportunities this benefit has presented.

So much for the needed benefits. During the past two years, I would have to say, to use the phrase coined by my friend Mr. Bob Schlifer, we have seen the emergence of "the silly period." I think you all know what I am referring to, but let me refresh your memory a little:

1. Own-Occupation Definition: If there is a good reason to pay an insured a full benefit when he or she is unable to work at his or her regular occupation, but is actually working at another, I certainly haven't heard one. We hear things like "The marketplace demands it," or "We have to reward someone for spending years developing a profession." It isn't necessary. Does my company have one? Yes, we caved in too. We have an own-occupation (own-occ) rider available only in the top occupational class, but we try to sell away from it. We continue to believe that the loss of income definition is most appropriate, and I believe most of our agents do too. Consequently, only about 25 percent of our eligible policyholders actually purchase this feature.
2. Cost-of-Living Adjustment (COLA) on Own-Occ and Automatic COLA Increases: To compound the own-occ problem, many companies are paying cost-of-living increases on top of a benefit that is unneeded. In addition, some COLA riders provide increases totally unrelated to and in excess of the CPI increases. Even Social Security does not do that.
3. Exercise of an Insurability Option While Disabled: What possible need is there to permit a claimant to exercise an option while disabled when his or her policy has annual options, anyway? He

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or she should have kept the coverage up to date before disability, as is the purpose of guaranteed insurability options.

4. Lifetime Benefits: The trend back to unreduced lifetime benefits, I believe, is not a good sign. Won't we ever learn? Is there really a need to provide someone with a lifetime benefit if disabled at age 62, for example, or even 55? Haven't most of our customers planned for their retirement with pension plans, annuities, Keough's or investments?
5. Unisex: The silliest trend of all has been the rush to unisex rates. To my knowledge, there is not one jurisdiction that requires a company to have unisex rates for individual disability income policies. It all apparently started with one company's actuarially absurd conclusion that "Since we don't have enough female morbidity experience in the professional class, we will assume it is the same as the male experience." The fact that we have little female experience in that class is true, but there is not one wit of evidence that the hypothesis is accurate. From that humble beginning, we've seen a trend in extending male rates to females in all occupational classes. There certainly is no justification for that. In my own company, we too have gone to using male rates for females in our top occupational class and for the next class (in group situations only). We still retain sex distinct rates in all other classes and in the 3A class, our second-best class for individually billed cases. I am not actuarially proud of our position, but it was deemed necessary for marketing reasons. At least, we have not labeled our rates as unisex for the simple reason that we want to track our experience in the future and adjust dividends, if necessary. Thus, for the time being, we merely have certain male and female rates that are equal, not unisex.
6. Pregnancy: Going somewhat hand-in-hand with the unisex rates is providing coverage for normal pregnancy, with no apparent additional cost. We all know that this is fantasy.
7. All Base Policy Coverage: A number of companies are now forsaking their Social Security Supplement riders and are issuing all available coverage under the base policy. While I am quite sure that this arose as just another silly practice, it may be a benefit in disguise. I am convinced, given the recent Social Security experience, that most companies have their Social Security riders underpriced anyhow. Therefore, providing all base coverage is a way of increasing the premiums to a more appropriate level, without much additional exposure to overinsurance.
8. Others: There are two other items that I'd like to mention. One is a design feature--presumptive disability. The payment of a disability income benefit when someone is presumptively disabled, I think is a frill, especially if the waiting period is waived. There is justification perhaps for a presumptive disability definition in a buy-out situation because of the nature of the buy-out. The other is not a design feature, but I wanted to mention it

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anyway--discounts. Group billing discounts, or discounts for annual premiums--none of these are really justified by the numbers.

I cannot see how recent experience has had much influence on product design. Most companies have had reasonably good experience in general, which has permitted them to provide the numerous enhancements we've seen.

At my own company, we continue to see excellent experience in our 4A class, expected results in our 3A class and awful experience in our 2A, A and B classes. But only about 8 percent of our business is in those lower three classes, probably because we have the highest premium rates in the country. By waiting period, we continue to see slightly worse than expected results in the 30-day plan, but good results in the other waiting periods. We still have very little experience with residual or rehabilitation benefits.

Our durations are long, primarily because of waiting periods of 90 days or longer, but the frequencies are well within bounds. By sex, although our female experience is very limited, the male experience is better by just about any measure.

The biggest problem we have, and I suspect others are in the same boat, is replacements, both internal replacements and external. Even though we have reduced the first commission rate we will pay on internal replacements and we have extended enhancements and higher dividends to existing policyholders, we still feel an enormous pressure for internal replacements. I'm afraid the situation is getting worse.

The outlook for individual disability income sales in the future is great. The market is just beginning to be tapped. One reason for this is the recent trend towards universal life, term insurance, current assumption products and others which pay small commissions to the producers. Disability income insurance provides good commissions. Many of our producers, including many of our older, big producers, who have never sold anything but whole life insurance, are beginning now to turn to Disability Income (DI) in order to maintain their incomes.

The outlook for individual disability income profitability is not as great. I believe the effects of the silly period are going to be with us for years. And the end is not in sight. DI expenses are high and climbing. But, replacements remain our biggest challenge. The greatest need, as I see it, is to develop a replacement-proof contract.

What will be the effect of the new disability table on our statutory earnings? What will be the impact of the new Federal Income Tax Act on disability income? Will we have a repeat of the morbidity experience of the 1970s? Will some company develop a universal DI policy? I will make one prediction. Once the silly period has run its course, I predict we will all return to the back-to-basics, need-oriented products.

MR. GERALD A. FRYER: I am probably going to take a few things for granted in my remarks over the next few minutes, so I'll begin by

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sketching where my company fits into the current marketing scene in disability income insurance in Canada. That market is about \$20 million of new premium every year. In terms of sales volume, we're basically in the middle of the noncancellable market. There are a few giants such as Great West Life and Paul Revere. Those companies manufacture the individual product that forms almost half of the sales by premium of the brokers and agents in Canada.

Canada Life issues about 2,500 policies a year, which puts it at about fourth place among Canadian DI product manufacturers. Our average size premium is close to \$900, and we are primarily in the white collar markets. Most of our business has exclusion periods of 30 days. Our definitions of disability vary by occupation class. We are the only Canadian company offering the return of premium benefit at the moment. In general, our morbidity experience is large enough to allow us to draw tentative conclusions, but we do rely a lot on the Society's data.

The name of this session is Disability Income Product Design, and "design" is a delightfully broad word which allows me to discuss just about any aspect of the DI business. This morning, however, I'll confine my remarks to current and future policy provisions and the data and methodology which help us to obtain rational prices for the various coverages.

In preparation for this session, I conducted a brief review of the actuarial literature on disability income over the past ten years. That review made me cringe quite a bit because many of the things that actuaries were warning against in the late 1970s are now standard fare DI policies: full benefits payable to 65 while the insured is still working; partial benefits payable while the insured is near retirement and still in his regular occupation; replacement ratios that do not decline as the claim duration progresses. I might add that those 1970s soothsayers didn't warn against removing the pregnancy exclusion or against unisex rates--but only because they didn't contemplate such possibilities! I'll touch on the merits and demerits of these various items in the next few minutes.

As far as unisex rates and pregnancy exclusion go, I think Mr. Hopper covered those quite nicely, and I can give you the reference to Mr. Bob Schlifer's excellent presentation on page 1885 of the recent Volume 10 of the Record. I can add little to their comments.

Another recent innovation is smoker/nonsmoker rates. Here the rate differentials are more likely to be borne out by experience but there is no solid statistical base. Incidentally our ratio of nonsmoker lives for our top class is 87 percent, and for all classes it is 72 percent, which is very close to the Monarch Life experience that was cited last fall by Mr. Bob Schlifer.

Now own-occ and residual, or income-based coverages, are not recent innovations. But from the perspective of this frozen Canadian backwater, I think the combination of the two, the dual definition, is. What I want to do in the next few minutes is try to answer the question:

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"What is the benefit with more risk, own-occ or residual?" Certainly, volumes have been written over the past ten years casting aspersions on either definition. Yet they have come to dominate the market. I am going to view each definition in the white collar market, the top one or two classes.

First of all let us define the benefits. Own-occ provides full benefits, often to age 65, if the insured is unable to perform the duties of his or her regular occupation. (The insured could actually be working elsewhere, and this is the main objection.) The residual or income-loss definition provides partial benefits in proportion to the loss if there is a loss of income due to disability. The main objection to the residual definition is that it allows the insured to gear down his work efforts near retirement, so that his total net income coming from the insurer and his reduced job is close enough to predisability income that he has the incentive to go on claim.

The obvious difference between residual and own-occ is the amount of the benefit--one is full, the other is partial. Also, the difficult time for the residual benefit is probably closer to retirement than for own-occ, so the average claim reserves to be set up for residual are probably less. The experts disagree about the likelihood of payment of a long-term claim, that is, the rate of these special claims.

The proponents of own-occ will tell you that the chances of being able to work in another occupation while being unable to perform one's original occupation are quite small, hence the benefit will be seldom used. They will argue that people's physical conditions are gradually worn down after their mid 40s, that chronic diseases will take their toll in a partial disability sense so that residual claims will occur more often.

On the other hand, the proponents of residual will tell you that this provides an incentive to return to work in the previous occupation, so that disabled people will end up receiving partial benefits instead of total benefits. If the own-occ proponents are right, the remaining question is: "Does the higher rate of claim on residual at an older age for a smaller benefit translate into a higher or lower premium rate for the residual benefit as compared to own-occ?" Our own testing suggests that, under reasonable assumptions, the cost of the residual benefit is smaller.

I object to the own-occ clause from several points of view. I say this as our own company is introducing it into the marketplace. It makes no sense to create a situation where the claimant's total income can be more than his predisability income. And, if we still believe that most people, having invested a lifetime in a career and a base of knowledge, wish to continue in that career, is it socially right to create a benefit that motivates them to work in another field, or to not work at all, rather than to work part-time in their own? With the partial definition, there is an incentive for an individual to return to work in his own occupation, where he probably wants to be anyway, without losing the disability benefit. Some of these considerations have probably led to the wider use of the dual definition.

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"Where is the data?" asks the numerically-minded actuary. Sorry, there isn't any. The definitions are too new and the real risk is too far in the future for adverse experience to emerge. In fact, the Society's Valuation Committee tells us, amazingly enough, that own-occ has no adverse effect in the first two years. In any event, companies, no doubt mesmerized by current disability earnings, have been busy liberalizing towards the dual definition in recent years. Will the time bomb eventually go off? Will the high motivation of white collar risks cancel the bad effects of the liberal definitions? Or will an oversupply of professionals create the very conditions in which bad claim experience will flourish? If excess claims on business written now occur fifteen years down the road, will their amounts and reserves be small in relation to the premiums on all business written subsequently? The answers to these questions may well define the viability of disability income in the 21st century.

To complete the review of current product developments, let us talk briefly about indexing. First, I do not believe that indexing predisability income in the residual benefit formula does anything except keep partial benefits level in an inflationary environment, assuming a constant post-disability level of work effort. Let me join the debate with Mr. Bob Schlifer who said the opposite at the Society Meeting last fall.

In pricing the cost-of-living benefit a few years ago, we basically assumed an inflation rate which was very close to our asset share yield, in order to arrive at the price and the cap we could afford. With real yields significantly higher--for now--cost-of-living is a money maker. The other thing we did to validate the price was to assume a lower yield along with lower inflation, and that seemed to give us just as good an answer. Of course higher yields would improve the profitability of our entire portfolio. Incidentally, about 40 percent of our eligible policies have the cost-of-living rider.

What one worries about with indexed coverages, of course, is that the real replacement ratio doesn't decline as the claim continues and the insured doesn't get any more motivated to return to work. This seems to be a bigger worry at the moment for those companies with flat-rate indexing of 5 or 7 percent or more.

A further, somewhat questionable, development is the ability to buy new basic coverage for the last increased amount of the indexed claim once it is over. This is on a non-evidence basis, and you can't convince me that the kind of risk you get, coming off a long-term disability income claim, is standard in any way, shape or form. I'm sure that the companies offering this new wrinkle are charging for the additional morbidity cost on the new policy in the cost-of-living riders.

Under the heading of recent experience, the main thing I want to focus on is the new DTS Table of the Society. Before I do that, I want to make a couple of comments about Canada Life and industry experience, just in case anyone else has seen the same trends emerging.

The first comment is that at Canada Life we have seen a large uptick in claims activity, primarily on the nontermination side rather than the

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incidence side, in the past twelve months. I wonder if this is typical. My second comment is derived from John Miller's Disability Newsletters Nos. 41 and 42. Loss ratios have drifted gently downward in the last five years. Has this contributed to the benefit liberalization? In other words, has the bad claim experience of the middle 1970s been largely discounted by companies and their actuaries?

I have several observations on the new Society table and its very extensive data. Some of them are along the lines of "Hey I didn't know that," or "Is that a reasonable result?" But I hope some of these remarks will help you in your future pricing and design work.

The first observation is whether the experience period is relevant to the future. Certainly, centering experience around the very poor year 1976, as it seems to be for the individual experience backing up the table, may tempt companies to build improvement factors into the DTS table for pricing purposes.

Variables were removed from consideration in the table, if they didn't have a high level of significance in the early durations and had no chance of significance in the later ones. On these criteria, both benefit period and a long own-occ period were removed. You might agree with me that this runs counter to the conventional wisdom that own-occ and benefit period do have a significant impact on claims cost. Are we now going to see own-occ clauses proliferate even further as a result of apparent conclusions from the DTS?

The new table gives us conclusive evidence, from individual experience, of the effect of longer elimination periods on claim costs. At the same duration from disability, there would be far fewer claimants with an elimination period equal to that duration than for shorter elimination periods. In the first two months thereafter, the rate of termination from claim would be much lower if the claim started at the end of the longer elimination period. In other words, with a longer elimination period, people are less likely to make a claim; but once they do, they last a little longer. And I think most companies were already building this into their elimination period--specific claim costs.

There is extensive data on males and females. Females, of course, have higher incidence rates almost exclusively. However, after three months on claim, we discover that male claims terminate at a slower rate than females, the difference exceeding 5 percent from months six to fourteen. Then the trend is reversed, probably because of male mortality and for years three to ten male terminations significantly exceed female terminations. This is all actuarially interesting, but the basic observation is still that the available actuarial data argues against unisex pricing.

We learn also that occupation class has a minor impact on terminations. In the first four weeks of disability, people in their 40s terminate at the slowest rate of all age groups, even slower than people in their 60s. This doesn't seem quite logical, but it's a result that the table is bringing out.

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Finally, let's look at the future. I've selected just a few items to focus on. First inflation. What if everyone except DI product designers gets lucky and it stays at the 3-4 percent level? We've relied implicitly on inflation in the recent past to take post-disability income needs past the amount of the claim. This may no longer be the case now that inflation has abated and that cost-of-living riders have proliferated. The other concern with inflation rates at low levels is the increasing over-insurance available with fixed-rate indexing riders.

Second, unemployment, remains at historically high levels, especially in Canada, even while disability income experience has been improving. Something has happened that the textbooks didn't cover. How did we survive the 1981 recession unscathed? Are we insuring an unemployment-proof class now? Or has the work ethic resurfaced to such an extent in North America? My pet theory is that the disabled made sure they recovered quickly during the last recession in order to ensure that the job they left was still going to be there--but that's just a theory.

As we learn that there is a limit on government involvement in the economy, I believe the philosophy of entitlement has reached its zenith. Governments faced with the realities of deficit funding are at last talking about cutting back on social benefits. And in Canada at the moment, we have a spectacle of the recent budget proposing to reduce or eliminate the increase in old age security benefits in the first 3 percent of inflation--but this is a test case on cutting back social benefits. I believe that not only will this create a marketing opportunity for the private sector, but that public attitudes towards policy benefits may well shift somewhat away from entitlement and towards a more rational real-claim-only point of view.

Certainly these comments about the return of the work ethic could spell good news in the face of the liberal definitions now being sold in the disability marketplace. One tends to suspect, however, that current products have already anticipated the new climate.

A universal disability plan is a possibility and was the subject of a paper by John Young at the 1984 Paul Revere Reinsurance Seminar. I'm not going to describe how it works in detail, but just imagine a general accumulation pot with premiums and interest flowing in and expenses and morbidity charges flowing out. Let's look briefly at the cons and pros of such an arrangement, as it would relate specifically to disability. I won't mention the normal universal life advantages such as stop and start premiums, new money yields, etc.

A typical universal life policy replicates a whole life policy, but with disability income there is a term to age 65 concept. Not a lot of initial selection is revealed in durational morbidity rates. So the reserve or fund which is left over after paying expenses and morbidity charges out of the first premium is not going to be high, and the good work the new money fund can do is correspondingly limited.

What I've said so far assumes the regular level premium that we are used to. The possibility of overfunding exists, leading to a limited

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premium DI policy. But here I start to worry, in a Canadian context, about the relationship of the policy benefit to the fund. At the moment the exempt test for tax purposes relates benefits to the reserve and prevents the reserve from getting too high in relation to the benefits. It's undefined for disability income and I would hate to see us get into a position where one would have to be contemplated.

So far I have been mildly negative about universal DI, but in addition to the normal universal life advantages there are several others that are peculiar to disability. First, the universal product might combine life, disability and other coverages under one umbrella. Second, business overhead and personal coverages could be in one policy and the central fund could be a coinsurance device. Once it was built up to the level of several times the monthly policy benefit, the morbidity deductions could be reduced to those for a longer elimination period with the funding of the earlier months of disability being paid out of the fund. The policy could have cash values, but the gains on termination in traditional DI policy pricing would be reduced or eliminated. And finally, unused portions of claim payments might be put back into the fund, allowing the insurer to assume even more of the client's financial management.

The last thing I want to discuss is the return of premium (ROP) benefit. Canada Life's experience over the past twelve years suggests this is a benefit which can be priced and reserved for. It improves lapse performance and the ability to recover initial expenses and it discourages small claims; it generates high commissions and premiums. The Canada Life benefit first pays after ten consecutive years in which there have been no or minimal claims, and at eight-year intervals thereafter. The benefit is 75 percent of the total premium paid less claims paid in that period. The premium rate is 40 to 45 percent of the basic policy rate. The benefit is priced according to the methodology defined in Mr. Ernie Frankovich's 1973 paper, which used a statistical technique known as the Monte Carlo method.

Since 1972 Canada Life has been putting ROP on 35 to 40 percent of new policies and by now because of the good lapses, close to 50 percent of the inforce business has this feature. Lapse rates are about 25 percent lower with this rider than without it. The average lapse rate in the first five years is about 11.5 percent on policies with the rider and 15.5 percent on policies without it. Claim rates and amounts are consistently lower on policies with ROP.

My personal experience is that individual disability income product design constitutes a microcosm of all facets of actuarial work and I commend it to you highly.

MR. ROBERT W. BEAL: I'm not a marketing expert, but I have picked up some knowledge of it along the way. In particular, I know that when products are so similar that cost differentials become a differential advantage, then there are going to be very few winners. And, I think that any discussion of designing individual disability income products should start with the question: "Has this market reached that point?" I believe it has.

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Individual disability insurance product development, for the most part, can be characterized as adding more chrome to the same old chassis. Features are dictated more by the wants of the sales force than clients' needs. Hopefully, we may be seeing a slow down in these efforts as new features push the boundaries of common sense. If that's the case these portfolios are becoming more alike, and as they become more alike, operating margins are traded off for ever-greater market share.

My objective today is to describe how my company has responded to these marketplace forces over the last couple of years. You may be wondering: "Gee, this guy is from Unionmutual, why is he so self-righteous about this? That company seems to have been doing all of this stuff since the early 1970s." And you're right. Unionmutual has been an active competitor in the individual disability insurance market for many years, and its product development has been very similar to that of most other major competitors. However, I hope that examining Unionmutual's responses in the marketplace may provide us some insight about the individual disability insurance market in general, and lead to some conclusions about the future of this product.

Unionmutual was one of the pioneers of long term own-occ. In the 1970s, a single portfolio with occasional enhancements was adequate in the marketplace. That situation changed in the 1980s. In Unionmutual's new 80-Series, introduced in the fall of 1981, basic coverage was still for total disability with long term own-occ, but was offered with a menu of new options such as the zero-day residual rider. There was a lifetime sickness rider which had coverage to age 55. A cost-of-living rider featuring a 2x cap was offered for the first time as was some compounded CPI flexibility in the choice of waiting periods and maximum adjustment rates. In the business market, the overhead expense and buy/sell policies from the old series were carried over.

This series was very successful, resulting in a 30 percent growth in sales for a couple of years. However, by mid-1983 it appeared that Unionmutual's competitors had out-liberalized it. There was extreme pressure to enhance the produce or start losing sales. So, in early 1984, that was done.

We in product design at Unionmutual kept what we called the 80-Series, but added some new things to it. In particular we improved the zero-day residual rider by indexing the predisability income. We provided a three month return-to-work feature where we didn't require a loss of duties, only a loss of income, and we added a twenty-four month minimum benefit period for those who become disabled close to age 65.

On the cost-of-living feature, we introduced a "no cap" COLA which allows the insured to purchase a benefit increase following a recovery from disability. We then went one daring step farther, we extended coverage to age 60 on a new lifetime sickness rider, which I understand is obsolete today.

For the business market, we developed a new overhead expense policy with partial disability benefits following the total-disability period. We

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offered guaranteed insurability options annually, and introduced a two month survivor benefit.

Only with the new overhead policy, and maybe somewhat with the cost-of-living rider, do we really try to lead the marketplace. Other enhancements were designed to meet the competition. We feel that our portfolio is very competitive, but more and more companies have the same features. Consequently, the market battle now seems to be going to those willing to give away the most profit margin. This year we have had something of a price war, not quite the same as the term/price war, but a price war. And all along, more guaranteed underwriting has been offered, as have higher replacement ratios.

The price war has not always been conducted through repriced portfolios, but also through discounts for select groups. There's been a bombardment of offerings of discounts to large professional associations in exchange for some form of endorsement. And sometimes these discounts are accompanied by guaranteed underwriting without strong participation requirements. The nonsmoker discount is also becoming more and more popular. Although there are few statistics available to support it, the general feeling is that a 10 percent nonsmoker discount is adequate. But then the problem of overall rate reduction arises since many companies offering special discounts, particularly the nonsmoker one, are not adjusting rates for other classes. Given this type of pressure, I personally was very pleased when Paul Revere introduced smoker/nonsmoker rates with very significant increases for smokers.

These discounts, whether to associations or nonsmokers, are a means of attracting market segments with better-than-average claim experience. Earlier this year, in keeping with the theme of attracting good risk segments, Unionmutual introduced an underwriting program designed for the small-size list-bill cases, which were identified through studies as a very good, very low risk segment. The program is called Protection III. It's intended for small list-bill cases which are either employer paid or, if employee paid, require 100 percent participation. The features offered include short form applications, higher nonmedical limits, higher issue limits and for employer-paid cases, 70 percent participation ratios in conjunction with LTD. Probably the most radical enhancement offered by Unionmutual is "customized" health underwriting for the three to nine life cases--if all the lives on the case apply for at least 80 percent of the maximum coverage available. "Customized" means that we will offer coverage to otherwise uninsurable risks, given a little bit of underwriting discretion, so that all applicants involved in the case will be issued a policy. This is a response to need. One of the problems with this market segment is that a case can include one bad risk, and the whole case can be lost in an "all or nothing" environment. The participation requirements are designed to offset the prospects of substandard risks by bringing in a greater number of good risks.

The Norris decision, in the summer of 1983, had major implications for most of the insurance industry. However, the reaction to it by some major competitors in the individual disability market is symptomatic of the product development mentality that I have been describing. Our

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lawyers at Unionmutual advised us in management that, if we wished to stay in the employee market, unisex rates were inevitable. And while our actuaries and product people wrestled with the problems this presented, Provident lowered its female rates to the levels of male rates (in the fall of 1983), essentially across the board. That made our decision very easy--at least the short-term decision. Like other companies, Unionmutual followed suit. This was an expedient move with the hope that future price revisions would reflect the experience of male and female insureds more adequately.

Well, Unionmutual then went one step farther in its reaction to the Norris decision. It applied to unisex interpretation to the whole contract, not just to the rates, and consequently the pregnancy exclusion was pulled. A little while later, Provident and other competitors followed suit.

At Unionmutual, we hoped that by not being the first with unisex rates, our percentage of female insureds on new business would not increase significantly. But, since early 1984, that figure has jumped from 8-15 percent. I don't know where that is going to end. I'm also interested in the effect of removing the pregnancy exclusion. Looking at reported claims on female policyholders in 1984 and 1985, we found that 41 percent were pregnancy related among the unisex policyholders versus 9 percent among the nonunisex policyholders. Although this result is based on relatively few claims, and hopefully reflects some antiselection in our internal unisex exchange program, it is safe to say that removal of the pregnancy exclusion will have a material cost.

Competitive pressures have been increasing steadily over the last three years. Unionmutual has experienced a 15-20 percent increase in lapses in years 1982 to 1984, primarily due to more business turnover associated with this greater competition. Unionmutual's persistency has been relatively good, in spite of the 15-20 percent increase. I know some people in the life insurance business who wish they had our problems at Unionmutual, but it is an element of concern for us. In order to protect our inforce block, particularly the more profitable segments, Unionmutual initiated a new business on old clients (NBOC) campaign last summer. It was offered to all AAA policyholders who had had no prior claim history and were in force since January 1982. The offer was to increase coverage, by \$500 or \$1,000 depending upon current salary, with rates based upon the original age at issue. No underwriting was involved. We plan to thoroughly study the financial implications of this offer with the idea of refining future NBOC offerings. Unionmutual feels that such periodic offerings may have more material and long-term impact on persistency than the traditional conservation programs that many companies have.

The individual disability insurance marketplace is often characterized as suffering from overpenetration. However, our studies indicate just the opposite. For instance, only 20 percent of the eligible top class risks own an individual disability product, and 70 percent of nonowners have never received an offer to purchase the product. Comparatively, 71 percent of nonowners do own life insurance. It appears also that

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owners of disability products on average, are less than 50 percent insured compared with the current income ratio guidelines.

If the market for individual disability products is nowhere near being overpenetrated, then today's competitive situation maybe created by intermediaries. Studies have shown that over 50 percent of individual disability business is sold by only 10 percent of the insurance agents and brokers. The relative complexity of these products, along with the life insurance focus of many agents, has forced individual disability coverage onto a lower rung of importance, that is, 90 percent of the agents seem to need simpler products and lower rates to make sales. The other 10 percent are in the position to make demands which create the competitive situation. Add to this the substantial influence of intermediaries over the purchase decision, and an environment is produced which discourages innovation and demands likeness.

Unionmutual still has a solid commitment to the individual disability insurance market. In spite of that, its plans are not likely to succeed if this marketplace continues to require similar products and ever-eroding profit margins. Long-term success will be assured only if companies respond to the true needs of clients. I realize this sounds more like a cliché than a solution, and it's certainly not easy, but how many of our companies really do that well? For insurance, most of today's companies offer only one basic type of individual disability coverage enhanced by a number of bells and whistles. Major variations in the basic plan are driven by risk consideration. For instance, Unionmutual has a shorter own-occ period for the higher-risk occupations. Consequently, we will offer two actuaries the same plan regardless of type of employment--self-employed consultant or employee of an established corporate entity. Recognizing that each actuary may incur different types of losses upon disablement, that is, that they may need different plans, is one very important aspect of good marketing. I think that is the main focus companies should have.

My advice to any company planning to generate long-term profits from the individual disability market is to make a bold move away from the status quo. A large investment is required to research the market and develop products to support it. When that is done, more investment is needed to bring those products to the marketplace, and to motivate the intermediaries to give up the status quo. That, in a nut shell, is the challenge.

MR. LIBBEY: I'd like to invite those of you in the audience who have questions or comments to please participate at this point.

MR. RONNIE KLEIN: I'm with Mutual of New York. Nothing too much was said about the trend toward cash values for disability insurance. Under the new tax law proposed by Reagan, increases in reserves for disability insurance might not be deductible without cash value features. Does anybody have any comments on the future of cash values for disability insurance?

MR. BEAL: Well, I've always dreaded the thought of having cash values, but the tax implications are certainly something we have to look

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at. Some people have always favored cash values and that was one of the great lures of universal life. When proponents there said: "And now you can have cash values," I said: "Well, there goes half our profits." Taxes are a definite concern, but I can't say that my company has been looking at that.

MR. HOPPER: I think the tax aspect is an interesting observation. I don't, however, feel that the existing forms of cash value disability income insurance are really appropriate. I think the marketplace has turned those down as simply being too expensive, and the companies have turned them down because they're difficult to administer. But some new forms, such as a universal DI plan, might very well be the answer to a lot of problems.

MR. LIBBEY: I would like to add one comment. The insurance industry has often taken advantage of tax law leverage. The Treasury Department, both in Canada and the U.S., have been quick to realize that something has been overlooked, and have moved to slam the door on those benefits. My cautionary note here is that if we desire to move to cash values, we should do so based on genuine client need as opposed to a perceived loophole in the tax structure.

MR. ZIMMERMAN: I'm with Crown Life and have questions for Mr. Beal. When you protected your inforce business by writing guaranteed issues, did you go through your distribution system, to get to the customer? In either case, did you pay intermediaries in your distribution channel any compensation? If you did, how did that compare to normal first-year compensation?

MR. BEAL: You're referring to the NBOC program?

MR. ZIMMERMAN: Yes.

MR. BEAL: We sent postcard offers directly to our clients, but we also contacted the brokers and paid them full commission on the increases. We believe, at least at this point in time, that it's not good to have the brokers feel that you're trying to break that link between them and their clients. So, anytime you offer new coverage, I think you do have to consider full compensation.

MR. ZIMMERMAN: Another question for the panelists: When you're trying to get your life product agents to sell some disability coverage and they're resisting it--telling you that the underwriting is three times as slow; you'll make a mistake on the underwriting and they might lose a life customer; they don't understand this product and will look like a fool--what do you do to convince them to trust you and try to sell the product? I find, in a lot of cases, agents will recommend the competition for disability, because they do not want to lose the life insurance sale if the disability product doesn't work out; that is, if the client declines it.

MR. FRYER: I think there are a lot of initial misgivings in getting into the disability line, for some of the reasons you cited. But from our point of view, the main way to get agent cooperation is through

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concentrated effort and product training. Let them know that there are going to be difficulties, but that, as they learn about the product, they will be able to filter out the bad risks themselves and end up with a better ratio of clients accepted to applications sent in. Education and marketing orientation are the keys.

MR. RODNEY WILTON: I'm with Dominion Life. I was very interested in the unisex issue because pricing individual disability income coverage depends very heavily on underwriting characteristics, some of which could be attacked on human rights grounds. Certain cultural groups are disproportionately represented in occupational underwriting groups, and we charge different premiums to people in different occupational classifications. The argument has always been advanced that if you can charge the same rate for men and women, who have demonstrably different experience, then why can't you charge the same rate for all occupational classes? Would anybody care to comment on that?

MR. HOPPER: Well, I think we shot ourselves in the foot over the unisex issue. A more appropriate industry response would have been to let the people in Washington fight the battle among themselves rather than companies jumping in early and immediately adopting unisex rates. The same argument applies to age and to occupational classes. You are right, if you can charge the same rates for men and women, then you can charge the same rates for all occupational classes, and all ages. I don't know how we would operate under an arrangement like that. I certainly wouldn't want to be a pricing actuary in that situation.

MR. LIBBEY: We'd certainly have a very simple rate book. Would anyone else on the panel like to comment on that point? I think you've identified a central issue that has been emerging over the last several years, and promises to become more of a concern over the next few. That, of course, is the whole question of proper risk classification. The capacity of disability income insurers to operate profitability depends on a pricing mechanism that may be judged by certain groups (such as legislators) to be an improper societal imperative. So, I certainly sympathize with you in asking the question, but I don't have a good answer.

MR. IAN CHARLTON: I'm with Independent Life. In life insurance, sex-based cost differences can be somewhat ameliorated using mortality rates weighted by the number of each gender you expect to cover. I wonder if that is true for occupation classes in disability income insurance pricing. Can you come up with a weighted-average morbidity rate, at least for the white collar occupations? My company's business is more in the blue-collar occupations. Also, to what extent can you underwrite the sex differential through occupational rating, by putting the male and female occupation subclasses into various underwriting classes.

MR. LIBBEY: Let me summarize that. I think you're asking two questions. First, is it possible to successfully combine male and female morbidity in the upper occupation classes? Second, is it possible to offset the effects of perhaps much larger female distributions in the

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lower occupation classes by shifting certain types of occupations to lower occupation classes? Does that summarize it?

MR. CHARLTON: Yes.

MR. LIBBEY: Alright. Mr. DeWeese, can you answer those questions?

MR. DEWEESE: Regarding the first question, I think that's exactly what happened. Insurers who were operating in higher occupational classes said: "This is easy. We're selling only 5 percent of our business to women anyway. We can cover that with a very slight change, or maybe no change, in the rates to the extent the experience is good enough to swallow the difference." And the fact that that was so easy to accomplish is what led people to do what Mr. Hopper described, "shoot themselves in the foot." Certainly I'd answer yes to your first question. That is what people did, on a de facto basis anyway. Regarding your second question, I think people are doing that as well.

MR. CHARLTON: I guess I wasn't entirely clear. In the upper occupations, is it done so that the male life can ask for a larger monthly benefit than the female? And, if your rates are graded by size, can you eliminate some of the sex differentials through a grading process by size?

MR. DEWEESE: I'm not aware of anybody who has done anything so sophisticated, but it is certainly an approach that could be taken?

MR. BEAL: I think I would clarify that--grading by size. It seems that was an approach with life insurance a long time ago. They would use different sizes of cases. In that situation, female mortality is potentially lower than male mortality, and the argument of lower policy size is used to come up with the same rates. This is before we had sex distinct rates for life insurance.

MR. CHARLTON: It is handled partially by the policy fee and partially by banding, but I don't know the current rate books. Do people band rates by size in disability income?

MR. LIBBEY: There has been some banding by size in disability income, but I've noticed in the last year or two that there has been a trend away from even the use of policy fees. Some companies are operating in the marketplace now without any policy fees. Other companies have tried banding by size and have discarded it, primarily because of producer resistance to the complexity of such arrangements. And I would agree with what Mr. DeWeese has said, that no one has taken that sophisticated a look at combining male and female morbidity in the upper occupation classes.

MR. HOPPER: I just want to comment on one thing Mr. DeWeese said, and he was absolutely correct. When we were thinking about adopting unisex rates for our 4A, our best, occupational class, we looked at our exposure and found that 6 percent of it was on females. So, to simply use the male rates for everybody made very little difference.

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However, in the 3A class, which is our next best class, we concluded that we would use so-called unisex rates in group situations only. To have used the male rates in the 3A class across the board would have cost us too much money. We were unwilling to do it. About 25 percent of our total 3A business is on females, so we could not justify simply using the male rates for everybody.

MR. BEAL: I am curious if any companies using unisex rates have had an experience like my company had--a shift in the amount of female business?

MR. LIBBEY: Is anyone out there in a position to respond to that question? I can say that Paul Revere has been on a unisex rate basis since early in 1984 and, at this point, we haven't been able to do the kind of analysis that would answer the question. My feeling is that we have not experienced a significant shift toward more female business. To respond to the earlier question about lower occupation classes--I think the methodology of shifting occupations to resolve male/female morbidity differences is one that will take place, if it takes place at all, in a very gradual way over time. It is a response that will be driven by the marketplace.

MR. WILTON: I'm with Dominion Life. In looking at some of the early claims on my company's business, which is mainly drawn from the lower occupational classes, I tend to feel that some information has been concealed, and that we aren't as vigorous in defending claims as I, as an actuary, feel we should be. Could someone comment on the effects of punitive damages as those relate to early claims where the insured has been less than candid?

MR. LIBBEY: Well, we could try. That's outside the scope of what we were prepared to address here. Does anyone want to respond?

MR. BEAL: I can't talk about punitive damages, because we haven't had any yet. But regarding the risk of not getting enough information from people eventually making claims against us, what evidence of adverse selection is there in our rates? I have looked at our claim incidence rates, separately for accident and sickness, individual bill and list bill. I found that in the list bill/sickness experience--there was evidence of anti-selection by virtue of a jump in third year incidence rates. I measured the figures against--just as a standard--the 64 commissioner's disability table (CDT) and got actual to expected ratios. In that particular category, there was a clear and definite jump. Now, the individual bill experience tells me that a lot of potential antiselection apparently gets diminished, or minimized considerably, when you're dealing in the list bill market.

MR. ZIMMERMAN: I have a question about retention levels. Someone once told me that a way to relate retention level to life insurance outstanding was to multiply monthly income by 100. Does anybody have any opinions on how to set the retention level, and once you do set it, how do you price the reinsurance cost?

MR. LIBBEY: Any thoughts on that particular question?

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MR. ZIMMERMAN: Does anybody know what their retention level is?

MR. BEAL: Well, Unionmutual retains all its business at the present time, although I am looking seriously at reinsurance and trying to determine an appropriate retention limit. Right now the maximum company issue is \$10,000, so I can easily say that the retention is \$10,000. Probably it might be less than that when I get done with my examination of reinsurance options.

MR. HOPPER: We have recently decided to discontinue reinsurance of our disability income business. It was simply costing us too much money for the return. We determined that by comparing what we were doing with disability income and what we were doing with life insurance. We had something like a \$3 million retention limit for life insurance, and our issue limit for disability income insurance was \$10,000 a month. Well, I think our retention limit at the time was more like \$4,000 a month. The disability income exposure of \$4,000 a month is far less than life insurance exposure of \$3 million. So that was an influencing factor in our decision to abandon reinsurance.

MR. LIBBEY: I'd like to summarize this morning's discussion. We have heard significant indications that:

- o the product design war, if you want to call it that, has moved at an accelerated pace in the last few years.
- o differences in product design features, among the leaders in individual disability income coverage, have become very small.
- o product design competition is shifting to other aspects of our business such as competition for producers.
- o there is much concern, and much to be done, about replacement problems. Those have lead to programs such as retroactivity of enhanced benefits and extensions of increased benefits to existing policyholders.
- o as a side-effect of the competition on product features, there has been a return to benefits which are not need-oriented, but are frills or even frivolous--and perhaps dangerous.
- o disability income writers must consider doing some truly bold or innovative things to break out of the traditional product molds and focus on meeting the needs of consumers.

I think that those are important points. They delineate a challenge for all of us in the individual disability income field. They affect profit margins as well as design features. The last comment I would like to make is that it's clear that the design features of DI products are irrevocably linked to profit margins. We must keep our eyes on those.