## RECORD, Volume 25, No. 3\*

San Francisco Annual Meeting October 17-20, 1999

## **Session 59PD Approaches to Underwriting Disability Insurance**

**Track:** Health Disability Income **Key Words:** Disability Insurance

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Summary: As group products become more "individualized" and individual products become popular for small groups, many disability insurers are rethinking the ways in which they underwrite their products. The panel explores the ways in which disability insurance underwriting guidelines must be closely linked to product design and sales methods.

Panelists discuss a number of specific issues, including emerging illnesses, the protective value of various testing procedures, the role of financial underwriting, and the links between product, price, and underwriting.

**Mr. Robert W. Beal:** I'm a consulting actuary with Milliman & Robertson, from the Portland, Maine office. Carl Amick is the director of product and underwriting standards at Northwestern Mutual. Scott Haglund is an associate actuary in the group non-medical department of Principal Financial Group. Anne Mitchell is a principal at Income and Benefits Solutions.

It's often stated that the lines are blurring between individual and group disability carriers, and some of the most active blurring occurs in the underwriting areas. Individual carriers are getting more and more into the employer-sponsored disability income market where some form of group underwriting is expected. Group carriers are writing more voluntary disability insurance where prudence requires some form of individual underwriting. Frequently, it is the product design and insurance methods that drive the type of underwriting. Consequently, group and individual underwriters have much to learn from each other.

Carl Amick will discuss how individual underwriting must focus on the micro level due to the decisions made by the company and the individuals, particularly where there are long-term contractual guarantees of the products. Scott will discuss group underwriting at the macro level and how these requirements are affected by the relatively short-term contractual guarantees. Anne will discuss the types of

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situations in the disability market place where group and individual underwriting tools are used interchangeably.

**Mr. Carl G. Amick:** Change is a big word in individual disability income (IDI) these days. When an industry approaches about a billion dollars of losses, it's time for some level of change.

Some companies might point to noncancellable; other companies might point to own occupation, but you need to look at the whole spectrum of what goes on in product management. Underwriting standards, I think, need to be viewed as part of the historical problem and part of the solution moving forward. There are other issues affecting standards. Obviously, the product changes need to relate to standard revisions moving forward. In some cases, with more restrictive products, perhaps your underwriting approach could actually be liberalized. In general, I don't believe that's the bigger issue.

External industry changes are very big issues right now for IDI. There have been material changes in the disability insurance (DI) industry in the last five years. If you have a program involving IDI that was working five to ten years ago, and you haven't modified it because of changes external to your company, it might no longer be profitable. Just because it worked in the 1980s doesn't mean it's going to work beyond 2000. Obviously, new standards need to be developed to address emerging issues and new opportunities.

Effective change is particularly important to DI because it's a big-risk product where individual selection can be significant with long guarantees. I'd say the guarantees are long even under the newer guaranteed renewable platforms that are increasingly popular.

Brokers and agents know what they like and what they're looking for. I will use the medical market as an illustration. The medical market has well-educated people who know what to look for in a product. As a result, blocks of business move around very efficiently. What I'm going to discuss is more of a model for reviewing and developing underwriting standards and less specifically refers what Northwestern Mutual Life (NML) is doing today.

In looking at these models, I will talk about Ruskin. You know it is the 50<sup>th</sup> anniversary of the SOA motto. Then I will talk about the Popper model. Carl Popper is a popular Austrian 20th century philosopher who spent a lot of time writing about philosophy of science on the other side of the Atlantic.

The problem with facts and demonstrations, in regard to an unstable product, like individual disability, is that they often do not exist, they seldom dictate an answer, they're often misleading, and they actually change.

It's an ongoing, iterative process. When you have no information you start with guesswork. Criticism or testing is a way to modify and develop the science and it just keeps going and you keep responding to new information and to new criticism and to new ideas.

I think to the extent that we aspire to be scientists, we need to do a better job of articulating theories that underlie our standards. I think that there are a lot of assumptions and ideas that underlie our standards that we haven't really done a good job of articulating or thinking through all the way. I think you have to intentionally or willfully construct tests.

Underwriting standards development becomes conscious and deliberate. You don't get up in the morning and worry about what next disaster is going to emerge in individual DI. You find the problems before they become disasters. Also identify new opportunities because it's a constant iterative process. No facts are final, it's responsive, it's corrective, and it adapts to the current conditions in the marketplace and current experience.

Central to all this is, obviously, testing, criticism, and what the sources of it are. I think the actuarial profession sometimes runs into difficulty in terms of it's reputation because actuaries get labeled as retrospective thinkers. By moving forward with disability management and underwriting standards management, we attempt to try to address postreactive issues.

I have a love/hate relationship with data, particularly in times of change like this. I think a lot of experience is obsolete before it really emerges. At least, I like to think that change occurs rapidly enough for it to be true. But still, I think NML particularly does a good job of studying its data. There are wonderful ideas that spring from that study. I'm just fascinated by looking at what's available on the actuarial side. I'd say, historically, we haven't collected enough data. I noticed in the late 1980s through the early 1990s, before companies figured out that they should really be tracking experience by actual occupation rather than just class, that they were looking around occupations.

An important issue is to think ahead and anticipate what the next informational needs are going to be. I'm thankful at NML that we've had actuaries who have historically done this. For example, there's a field in our claims record that is intended to identify whether a claimant is working and whether they could go back to work at a reasonable occupation in the days when pure own occupation was primarily the product of choice. You might think that you didn't need it, but in terms of new product development and the issues facing the industry right now, that's just wonderful stuff to be able to look at.

I think it pays to look at data. You just never know what you might see, and it can be the source of new ideas and possibly new opportunities. In terms of testing and criticism beyond data, I'm thankful at NML for the way we're set up. We have a DI profit center. I'm in product and underwriting standards; I work outside the actuarial department. Because of that, I have a different perspective. Some actuaries might consider my perspective to be more market-focused than the corporate actuarial area, but as a result, there is a regular, very lively exchange of ideas that goes on between the disability division and the actuarial department. I think a result of that change is constant improvement. It's just a wonderful dynamic. Every company should be set up that way.

What's really going on in other disciplines? I'll start with claims. Your claims folks know what is happening before the data emerges. They see issues, certainly they approach them with a certain negative bias, but I think if you filter through that and listen to what they're saying, it can be a source of wonderful ideas. It can be a very early intervention source.

I've seen a couple of situations recently in underwriting where programs were put in place by me or people like me, and they turned out to be ivory-tower solutions. When you get into real-life underwriting, it turns into a problem. Things don't get underwritten the way you thought they might be, and understanding what is going on down there is critical to addressing emerging issues.

For marketing, a big piece of what we do is to find new opportunities. Marketing is a source for that. One thing we've done at NML is to do preference studies where you hire behavioral scientists from an outside firm, and they get a room somewhere and interview a specific group of people. You sit behind the glass mirror and watch the discussions. Say you have a group of lawyers or a group of small business owners and you listen to them talk about what's important to them in terms of product design. It's fascinating what comes up. You get a real understanding of what's going on in the mind of the market. You learn what people think they own in a DI contract, regardless of whether they own it or not.

In the discussion with the lawyers, it was frightening, actually, to learn what they knew about their disability contract. To back up a bit, I've been involved in discussions amongst insurance agents where they sit around and talk about how people with high net worth behave, or how people with million-dollar incomes behave. I really don't think that that's an area of expertise to most of us. There are people out there who deal with these groups. We should go outside the actuarial profession for some ideas that relate to this claimant and policyholder behavior.

I have a few interesting real-life examples of how this works. 'Take a classic actuarial study with have five years of data looking at the issue of performance by amount per life. This is monthly indemnity per life. The year 1993 pretty much supported the notion that highly insured folks have high expenses, and consequently, behave pretty much like everyone else.

Moving forward to 1998, you start to see an issue emerge. However, because we're using a traditional approach where you take a block of business and you blur together a bunch of issues by looking at five years of exposure, it still leaves some questions as to exactly how bad the situation is. In order to actually go in and figure out whether what looked like it was emerging was actually emerging, we did a finer cut on the data looking only at the most recent experience.

There is a value for odd tests. One thing that's in our loss-ratio database is a field that identifies whether an applicant filled out the aviation questionnaire on the application. It's interesting information. We've struggled with what to do with it between aviation and a similar illustration on the avocation side. It's costing us a

material amount of money. We are struggling with the fact that these lines don't overlap more.

We've come up with some theories as to what might explain it and done some testing of our theories. The first was that there was a correlation between aviation and medical market experience. But we've split it into medical and nonmedical and you the same pattern emerges. The second theory is that these folks were risk takers, generally, and we tested that. We did a study based on the distribution of claims by accident and sickness, and it was pretty consistent with a normal population, which seems to rule that out.

We still don't have an answer. It's still one of these issues that we're kicking around looking for something. I think we might possibly figure it out and will be able to find a better solution to it than the current program.

**Mr. Scott D. Haglund:** I'm going to be talking about things from the group side. I will talk about underwriting as an art versus a science. I think there's a lot more art to it than science.

With individual disability, you definitely have longer term rate guarantees. You typically get only one chance to underwrite at the sale of the product. There are some riders where you can underwrite again if there are some increase provisions.

On the group side there are ways of underwriting multiple times. Every time the group renews, you have a chance to at least underwrite the group since you have the group in-force you might have additional information you did not have at the time you wrote the case. You might view the risk much differently—at least on the rate side. In some of the provisions we offer, there are shorter term rate guarantees than what individual disability has. The time horizons are different on the two. With group, you might not be as concerned about the initial underwriting because you'll get another chance at it in a couple of years. In that sense we're not so concerned about locking in certain things because we'll get a chance to review it.

We're going to talk about three different underwriting factors that would occur on the group side. One is the distribution channel, whether you are selling to brokers direct or using the Internet, which is starting to show up a little bit. We'll discuss underwriting the employer and underwriting that will happen on the employee. I'm also going to talk about some of the chances you could be taking. What might be the new underwriting provisions, and what might happen as those occur.

Underwriting might vary depending on how you sell the product, your distribution. If you're going to sell it direct to the employer, through a broker, which is the traditional way, or through Internet sales, your underwriting, I think, will vary based on what distribution channel you're selling it through. You might be a lot more restricted in one versus the other. Again, there are concerns with each one of these channels that aren't issues in some of the other channels. Also, each one of these distribution channels will probably imply a slightly different loss ratio because of the expenses associated with each. The results you're going to expect out of the product should vary depending on how you sell it.

With direct sales you definitely have more control over the situation. This would be the company going directly to the employer. You're not going through anybody else. You're actually talking directly to the employer. There are reduced expenses compared to the broker channel because you don't have to pay the commission to the broker. You might have some additional fees that you actually pay to your group sales representative, but that would be much less than the commission paid to a broker.

Typically, you'd have larger groups so you'd follow large group underwriting procedures. I'll touch on those a little bit. Normally, you would have a very large customer, otherwise it might not make sense for you to go to them directly. It could be they have a very large case with you already, possibly on the pension side. It might be a large medical customer and somebody you'd have a relationship with already, so they know you. I think a cold call to a large customer might not be as effective as someone with whom you already have some type of relationship, even if it's on an ASO claim administration situation. You would need to have some relationship with these people.

Broker sales are more costly than going direct or to the Internet just because of the commissions involved. You need a lower loss ratio on this product to remain as profitable because of those expenses going out to the broker. One of the other things is, does the broker currently have a relationship with the customer? If they do, you probably have a much better chance of selling the case than a broker who has no relationship with the customer.

Usually, in-force brokers will have more available to them so they would be able to understand the case much better. If you ask new brokers for information on some of the larger cases that might be experience-rated, they might say, "No, I can't get that because the other broker won't supply it to me." If the broker is not the current broker, you might not have as much information to deal with. Knowing that going in you might say, "Well, I know you can't get it," versus the in-force broker who should have all the available information, so that might dictate.

With a broker who is not the current broker you might have to make a lot more assumptions to sell the case. You might also want to consider your prior experience with that broker. Will they retain the customer for you or will they shop it at the first opportunity? You should look at the case to see if it has been moved every two years, every time the rate guarantee drops off? If so, it might not be a desirable customer even though their loss ratios are good and everything else about that case is good. However, if you expect it's going to take three to five years for you to recover your expenses and they're leaving after two, that's not a profile that you want.

If you know the broker is going to move the case every couple of years that alone might make you say, "I have no interest in this case because they're just going to roll over on me, and I can expect in two years I'm going to lose this case."

Also, what types to business have they brought you before? If you look at some of the brokers, if you actually have broker-level information in your business, you can get really atrocious loss ratios on certain brokers. It could be for some reason the broker knows your organization will accept this risk when nobody else will, so they always come to you. You can get horrible loss ratios from a broker just because they know something about you that maybe nobody else does.

You're looking at loss ratios on brokers. Broker underwriting can show what they have helped you with or hurt you with in the past. Also, consider the broker's experience level in the industry area and product. A broker who is very educated can be as troublesome as a broker who has little experience. If they have a lot of experience and your underwriters don't, the broker themselves can select against your company by convincing your underwriter of something that may or may not be true.

Shotgun prospecting can be an issue. If there is a spreadsheet situation where they send a request to 40 companies, you're looking at just a pure numbers game. You might not want to get into that situation where you are spread-sheeted, where they're just looking for somebody who is on the lowest end of the rate.

Internet sale is a low-cost sale but little underwriting is available. There are a few companies out there right now that are doing this. You can get a quote through the Internet, at least enter the census on the Internet, and then they'll contact you about the rate. There's not much underwriting other than what they're typing in as the group itself is requesting information. Typically, I believe there is going to be a smaller client base unless there is a human resource person who really enjoys typing.

For Internet sales you might want to restrict the plan design to remove the selection issues. You might offer only limited plan designs. It could have a real low benefit, like two to five years. Then, at the renewal, you could review the offering and find out how that group has run and then offer them something better after the initial rate guarantee drops off. This will allow you to reach clients who were unreachable before.

There are some size cases or maybe parts of the country that brokers have a difficult time reaching. It's not cost effective for them, either, to prospect some of these small companies. The Internet would allow you to connect with these companies. I think, in the age of Internet, some types of industries, particularly some of the high-tech ones, are used to seeing things they can get over the Internet, such as product services, and so on. Even though they might not buy from you through the Internet, they at least expect you to be able to offer them some information over the Internet.

The loss ratios might vary. For example, you might see a claim cost at 71% of premium you could pay off to the customer with 29% going towards other expenses. On the direct side, you might have to pay your sales representative a little bit more so the percentage for other expenses goes up a little bit (30%), but the percentage of premium for claims (70%) is similar to the Internet sales. On the

broker side you might have a 10% sales cost, which is the commission you're paying to the broker. The other expenses go down (23%) because the broker is doing some services for you that you don't have to do internally. That might or might not be true. Finally, you come up with a claim cost (67%) that's lower than the other ones. Directionally, this is correct. This is an example of what you might expect from different claims patterns.

Employer underwriting can get real fuzzy, almost fuzzier than the employee underwriting. This is where a lot of the assumptions and much more time is spent on the employer than on the employee. Industry is one area where you should look. Is it a growth industry in a growth area? Or is it a growth industry in a depressed area? We do have people who focus just on overall high tech as a real growth industry. That might be true nationwide, or it just might be true in California and Florida where it's a real growth industry. Maybe you are in the Midwest, and it is just terrible. I think to get a vibrant employer, you need to have both. You need a growth industry and a growth area.

The question becomes, if they're currently growing in a depressed area, is that sustainable? Are they going to get depressed along with the other industries in that realm? That's a real difficult thing to underwrite. Probably, in the smaller cases, you aren't going to know this. If you try to do target-marketing segmenting by industries, you might not have a lot of success in trying to come up with this information. I think, at least for disability, it's typically true that there's little information. In the grand scheme of things, it's a relatively new product with not much information available.

Another area to look at is how long they have been doing this. The normal standard is two years; you want two years in business. With all the merger acquisition activity that is going on, there are a lot of companies that haven't been around for very long. The question then becomes, if it's a brand-new start-up company, is there some way you could offer them insurance? I believe that there is. If you do look at benefit periods, and if you limit your liability, you might build a right to these start-up businesses as long as you restrict what you're offering them.

If the companies are still in business after a couple of years, at that point they would have met your two years in business guideline. Then you can enhance what you offer to them, like any other business that's in place. If it's a business that is a true spin off, but if they have financial backing from another organization, that one might also be acceptable. It could be a company that outsourced some product or service, but took some of its employees, moved them somewhere else but they are still financially backing them. That also would be a much more financially stable, viable company going forward.

Mergers/acquisitions (M/A) are a problem. For disability, they are not a good event for any industry. The biggest problems are people who had back injuries or some other ailment before the merger. They were able to work through it in the previous environment, but all of a sudden, if they're concerned about retaining their job then that back injury becomes disabling. Ideally, you'd want to take on the case after the M/A had taken place, hoping that that effect has already occurred, and it's with

the prior carrier. However, there's going to be a residual impact on people who are concerned about what their job will be a year from now. You still are going to have people who might select against you down the road.

Financial history from the employer is important. You want to look at bankruptcies, which, if you look at it in a different way, might be a good thing. Maybe the company wasn't doing so well, but the restructuring helped them because they were able to change some of the debt. Change for the organization might be good, and yet, the question then becomes, how long can they keep paying us premiums? Are we going to get two months of premiums out of them and then nothing beyond that?

Find out if they have growth in revenue and income. 'What you might find out after you have the case, is that maybe they don't really like their employees. They're happy that people are out on claim because it might be someone who is a thorn in their side for years and they are very glad that that person is now disabled. You won't find out about a lot of those attitudes until you try to rehabilitate somebody. Then the employer says, "Well, we don't want him back." It's not so much a problem with the employee at that point, but you have problems with the employer.

Multiple locations can be difficult. If the employer has multiple locations, it might be a contributory case where the employees are paying part of the cost. Are they going to market it to every location or are they just going to hit their biggest ones? One of the examples, although I don't have experience with them, is Federal Express. Think of the Federal Express idea, where there are relatively small operations all over the place. How are you going to contact each one of those different sites and actually offer insurance to them? That's one of the problems with work-site marketing or even the voluntary cases. How are you going to hit all those different locations, or will the employer actually allow you access to all those spots? You might get poor participation in some of those cases because of all the real small groups all over the country.

Contracting employees becomes a problem mainly because of some of the definitions of disability. Someone might be working out of his or her home. How do you determine that they're disabled? One of the tests might be, if you can't make it to your workplace, then you might be disabled because of back or other types of ailments. If you're actually able to work out of your home, the determination of being disabled is a lot more difficult.

Also, the definition of compensation for contracted employees is difficult to determine. They might not be official employees of the organization, so will that company have any incentive to try to get them back to work if they can just contract somebody else to do that exact same work? There are some sticky issues with contracted employees, but because it's getting more and more common, it's an issue that has to be discussed.

How many claims are credible? It varies industry-wide what each company views here. Does one large claim make the group undesirable or have they had their one and only? For a 100-life group, if they have one claim, their loss ratios are

probably atrocious if it's a big enough claim. If they've had just one huge claim, do you ignore that huge claim or do you just say, "Okay, that's their one and only so other than that it's going to be a good group"?

Everybody does have different ways of viewing the same thing on the credibility side. Does a bad group build credibility faster? If they have a lot more claims, do they become credible faster? If somebody has real good experience, does he become credible slower? Is a 1,000-life group with no claims believable? I would say, "No, it's not believable, so do they have any credibility?"

Table 1 is an example between small and large employers and why you have to be concerned with how much you underwrite. Assume, in this case, that they have a total premium of \$1,200. Assume that they have a fixed expense the same under both. The variable expense, which is just a percentage of premium with some other things factored in, would indicate that the fixed expense for small case can be a real high number. In this instance, 21% of the premium is going to some fixed expense, which might be your underwriter cost. This cost includes mailing cost, systems cost, or whatever. It leaves me with 62% of my money left to pay claims.

TABLE 1 EXAMPLE OF EMPLOYER UNDERWRITING

	Small	Large
Fixed Expense	\$ 250 (21%)	\$ 250 (0.5%)
Variable Expense	\$ 200 (17%)	\$20,000 (24.5%)
Claim Payments	\$ 750 (62%)	\$60,750 (75.0%)
Total Premium	\$1,200	\$81,000

On the other side, a larger case has the exact same fixed expense because of the definition of fixed. The variable expense is higher, but it leaves me with a lot more money to pay claims. On the small cases, one of the big concerns is how much money am I going to pay to underwrite that customer or that employer? If I spend a lot of money underwriting them, that will drive down how much I can pay out in claims on that customer. If it drives it down too low, then you're going to have some regulatory problems that you're not hitting stated loss ratio guidelines.

With the small employers you really have to be concerned. Maybe it's an expense allocation in your company. You might have to review how that happens, just so the fixed component is maybe no longer fixed, but it's variable, based on size. A concern, at least on some of the smaller businesses, is how much money am I spending bringing this onto the books? This could be where the Internet solution is better, aspects such as the electronic enrollment would help drive your costs down allowing you to incur more claims on that same business.

Employee underwriting is similar to some of the individual groups. In smaller cases, where it's allowed, we are able to get statements of health. Usually, if it is under ten lives, we can get a statement of health on them. Typically, this is a simple yes/no questionnaire. With the smaller cases, the employee has a lot of selection issues that you need to worry about. Contributory business is where

they're paying part of the premium; the employer might be paying 80% or half of it, but the employee pays the rest.

Buy up insurance. They might offer employees a 50% benefit; employees can buy up to a 60% or a two-thirds benefit. Again, the employee has some choices.

Income levels. The higher income people, again, as Carl mentioned, might behave differently than the lower income people. Also, age can be a selection issue. Typical of what you might find in the medical industry is that surgeons, as they get older, are no longer able to be surgeons. Some of their disablement might be because they can no longer be surgeons and they've seen income levels drop off because of their practice. Younger stock brokers or someone who has a real high income level might be having just a phenomenal year in the stock market with their customers so they have a real high income, and then the market plummets. People who aren't used to the stress might burn out. There are certain things that are age-related.

Lifestyle choices can make a difference. That's not going to be information you're going to ask. Short-term disability, which is typically a nonoccupational coverage, can be important in some occupations. Does the occupation matter considering whom you intend to cover? If you screen out the occupational influences, is the blue collar worker the same as a white collar worker, or as management can you say, "We're not covering you if you're injured on the job?"

On the long-term disability (LTD) side, how much does the occupation impact it? A lot of times that might be up to your underwriters to decide based on the mix of employees in this group. What risk am I going to assign? What is the turnover in the industry? Are there employee-justified benefits? It might be the fast food industry. Maybe they're just looking for medical coverage or disability coverage. Are they working just to get this benefit from the employer? That goes along with part-time employees. Do they need that income? How much do they need that income to support the family? It could be their family doesn't need that income at all, so they have no incentive to return back to work.

Normally, for employee underwriting we look at age, gender, income level, occupation, and the number of hours worked. There are other things that are influences, such as smoking (which is not a normal risk parameter, at least for disability), marital status, religion or faith, and the culture that the employee comes from. If you look at international coverage of certain cultures, the family assumes responsibility for those who are injured or disabled. None of this is asked, but actually might have a bigger influence on disabling conditions than the things that we are asking.

Regulations, state mandates, rated benefits, and coverages all have an influence on your underwriting guidelines. There might be something you can no longer ask, or there might be a coverage that you have to provide so you're forced to assume something. Does the rate make sense? Also, given your variety of rating adjustments, do they make sense when combined? Will the rate be unprofitable

even if no claims occur? There is some fluidity in the rates because of how people view the risk.

For example, before you adjust the rates, you might expect an incidence rate of 3 claims per 1,000. In order to be profitable, given the adjustments you made, you might all of a sudden realize that that means you can only have 1 claim per 1,000 or 1.5 claims per 1,000. Then you have to combine all this stuff and say, even in a group that has fantastic experience, can I be profitable at this low rate level? By the time you're done, you do have to step back and say, does this thing still make sense? Could I make money on this case?

Taking chances involves when to step outside the guidelines. At least for the group side, there are guidelines versus rules; there are no hard-and-fast things that you have to follow in every situation. Again, it gets back to the art versus science. Looking at the large picture, the risk profile of the entire case, there might be certain things that aren't working well if you look at your guidelines. It could be a certain risk profile that isn't acceptable, but then there could be some other things they ask for, some other characteristics that could override those.

Companies started taking chances and saying, "What would happen if the employer only paid half the premium? Would we still insure this?" That's when the new products started to get created. Someone took a chance and then looked at what happened when they took that chance. It is the beginning of a new industry or area. Again, your guidelines might not apply to that, but you might have to take a chance if you want to enter the market.

International coverage is going to be one of the most difficult challenges. How can you write an international coverage profitably for those of you who are in the global market? The U.S. underwriting guidelines won't apply to a lot of the international areas, so you are going to have to either work somewhere in that area, establish new guidelines, or just say you're going to literally have to take some chances and build the guidelines as you go.

**Ms. Anne G. Mitchell:** We know that group and individual disability products have very different underwriting and risk management practices. The underwriting practices are different because the products are used in different markets for different purposes and sold through different distribution channels. But we know that today the uses of these products are blending, and so the risk management tools are blending as well.

That's what I'm going to talk about, but first I wanted to talk about the history of the two different products, because that history has influenced the risk management tools. The roots of group LTD were as an employee benefit. Employers were providing this benefit to groups of employees and that sounds very straightforward, but it has implications for the risk management.

First of all, as an employee benefit, it means that the product has to be easy to implement for a lot of people. You can't underwrite the individuals. Can you imagine having a group of 5,000, or 1,000 or even 200 people and wanting to do

the full medical underwriting on them? The broker would have a fit, the employer would have a big productivity loss, and I don't think insurance companies could handle 1,000 applications coming in on a case. Because this product was sold as an employee benefit, it negates the ability to do that detailed medical underwriting.

On the other hand, though, you do have the employer involved in the purchase decision. This is a powerful tool because it reduces the antiselection. The person who is making the purchase decision isn't the same person who is going to be insured. I'm talking about a larger case here. Certainly with a ten-life group, the decision maker is close to all of the insureds, but for the larger cases this is a very powerful risk management tool. Having the employer involved in the distribution channel is a positive risk management tool, because typically the employer's interests are aligned with the insurance company's interests in that they want this claimant to go back to work.

Finally, because this was designed as an employee benefit, your covered lives change continuously. You have new people coming in, you have people who are leaving the group, and they are no longer part of your risk once they leave the group. Their incomes and ages are changing, so this is only a short-term guaranteed product. While nobody wants to make a mistake, if you do make a mistake in your risk management it's a lot easier to correct it on the group side, so you can take a little bit more risk.

Because LTD came through the employee benefits route, you have these as your traditional risk management tools. For example, contract language. You can't get rid of the existing claims or existing conditions through medical underwriting, so instead you have a pre-existing clause in your contract or a limitation on mental and nervous or own-occupation period. You give minimal individual choice. Again, that helps to get rid of a lot of that anti-selection. The employer is deciding what everybody can get; there's not any variation within classes in terms of what sort of coverage. As Scott discussed, there is a lot of underwriting about the industry and the company, and some discussion or some thought given to the occupations but not in the same detail as on the individual side.

You need to have a limited enrollment period. Having control around the length of time people have to sign up helps prevent anti-selection because you don't have the situation where somebody leaves the doctor's office with bad news and goes and buys a disability policy. They can only sign up during a certain period. As far as participation levels, I've looked a lot at this, and I think that for the large cases, certainly, a 100% participation requirement is a powerful risk management tool.

Individual disability has a different history. It was designed for professionals and sold to individuals. That means it has very different needs for risk management tools and the ability to get different sorts of information. For example, with individual disability, you have a one-on-one sale, so you can do the individual underwriting. You have access to the information. You have a broker or agent who's working with that insured and can help him or her fill out long, detailed applications. The administrative burden for the insurance company isn't so great when you're talking about one person at a time. Also, the individual professionals

were typically fairly wealthy individuals, and they are able and willing to pay for the richer benefits. The benefit features are more important in this market than having a low premium. These people wanted to be sure that they were covered for disability, and they wanted to be covered for as long as they were planning to work, and so it's not uncommon at all to have a 20-year or 30-year guarantee associated with an individual disability policy.

A key point to me is that the applicant, the person who is going to be covered, is making the purchase decision. Antiselection is a concern. There's no way to protect your company against all antiselection. You'll never know as much about a person as they know about themselves.

The risk management tools for individual disability are very different than group. On the individual-disability side, you get into very detailed review of occupational duties. How long have they been doing their job? What sort of training do they have? What percentage of the time do they spend in each of those duties? Also, you can explore sources of income. What is their earned income and history of earned income? Is it salaried? Is it commission; is it bonus? What's their unearned income? What's their net worth? Will they be able to live very comfortably without any earned income? You need to consider all of those things.

With individual disability you learn the applicants health status. It's not uncommon to have a 15-page application asking medical questions. For the past ten years or so companies have gotten blood and urine tests, obtained copies of medical records, para-medical exams, and EKGs, for a very detailed review of the person's health status. Agent reports, or inspection reports, where a third party is giving an observation about the person, was common. It's becoming a little bit less common.

Personal habits are also important. Do they have dangerous hobbies? Do they smoke, do they drink, or do they use drugs? You're doing this detailed investigation on the individual side partially because you can. You have the time and the premiums are high enough to be able to pay for all of these investigations, but you really have to do it with the anti-selection that's there.

But now we're in a situation where the distinctions are blurring between group and individuals. Instead of having an individual professional, it's very common to have groups of professionals that get their disability coverage as an employee benefit. It's also common to have both group and individual coverage put in place on one case or on individual choice in group sales. The risk management tools need to be rebalanced as these products are used in ways that they historically weren't used.

The value of the use of each tool correlates with the other tools you have in place. For instance, I know a lot of companies have stopped getting EKGs on people on the individual side, because the vast majority of the time, the information you would find from an EKG, you can already get out of reading doctor's notes and looking at blood tests. EKGs are expensive and time-consuming and don't give much value.

I compared the relative value of different tools (medical underwriting and pre-existing clauses) at different participation levels by looking at data around what percentage of a block of business was declined. Then I bumped that up because of the sentinel effect. The sentinel effect says that if somebody knows they are going to be underwritten, they won't even bother to apply, so I had to bump up the decline percentage somewhat. Then I knew what percentage of the block was issued on a substandard basis and what percentage was standard. I made some assumptions about the excess morbidity in the decline block and the substandard block. Finally, I assumed that the first group of people who come in are going to be those declines, then you work your way down to the substandard. After you get to a certain point, everybody else who comes in is a standard risk. The relative value of medical underwriting is much greater than the value of a preexisting especially at the lower participation levels.

The relative value of medical underwriting decreases pretty significantly up to the point when you get to 100% participation. Medical underwriting is not that much more powerful than a pre-existing clause, although it never gets to zero. Even if you have 100% participation, there will be people with certain conditions with each of those tools.

One example of the blurring distinctions is voluntary LTD. This is one of the most rapidly growing segments of LTD, where the employer sponsors the coverage but the employees choose to purchase it or not. The employees have to pay for it. It's growing because it helps to contain costs for employers. Employers don't have to pay for the coverage, but they give their employees access to disability coverage at group rates. Due to the diverse work forces that we have now, not everybody feels they want or need disability insurance. Maybe they are at a point in their life where they'd rather spend their money on long-term care or richer medical benefits. Employers are recognizing this. With voluntary LTD, you lose some of your traditional group risk management tools. You lose the minimal individual choice because now people can decide whether they want to buy or not. In some instances, although not all, they can also choose what sort of plan features they want.

Participation levels have gone down to 25% in some situations for voluntary cases. You lose some of the employer involvement. You still have a bit because they are sponsoring the coverage, but you've lost a lot of the power of that tool. That means you have to add a few tools. Typically companies add evidence of insurability questionnaires with broad medical questions, not unlike the individual medical underwriting, and they'll accept it or decline. You don't see substandard ratings and waivers. You see tighter contract language in the form of tighter pre-existing clauses and rates that are much higher for the voluntary. You'll get more claims, but that's okay as long as you are priced appropriately for it.

Multi-life individual disability is another place where the distinctions are blurring, and this is where groups are buying individual disability coverage. Often it's used to enhance benefits for the top employees like an executive perk or the partners in a law firm. Also, employers find it a way to attain some rate stability because of their limited variability on the individual portion of their disability coverage. And,

this one always surprises me, but I've heard a lot of employers say that they like to provide portability for their employees.

A very common reason for using multi-life individual disability is to give higher benefit percentages or a higher maximum amount to the top people without impacting the group rate. When you're talking about multi-life individual disability for the larger cases, you're really talking about guaranteed standard issue becoming much more common in the industry. That means you have to subtract the vast majority of the review of the individual's health status. You do still want to look at existing disabilities, but not necessarily existing conditions. Are they currently disabled? You want to protect yourself against taking on an automatic claim in the form of a presumptive disability.

There is some financial underwriting, but typically companies don't look at the unearned income or the net worth, and they will use a census rather than get tax returns. Because you're losing those individual tools, you need to add some of the more group like tools and participation levels is a big one. Remember the information I gave earlier for the relative value of risk-management tools. When you're out at 100% participation, what you are giving up in terms of medical underwriting is not as great, so participation levels are powerful tools.

Limit the choice. An employer will make a decision on who gets what. Nobody can choose different benefit percentages or adding certain riders where other people don't add riders, and they include the limited enrollment period.

Finally, here are a few other examples of situations where risk management tools need to be adjusted. In the combination plans, individual disability and LTD are packaged, which is interesting. I'm not sure that companies are doing a real good job around underwriting. With combination plans, you often have two separate companies offering the group and the individual, and if not, there are two separate underwriters who may be in different areas of the company.

It's important to think about the total maximum amount. You might have a \$10,000 LTD and a \$5,000 guaranteed issue individual disability but that's really \$15,000. So you may want to do some medical underwriting where ordinarily you wouldn't if it weren't packaged. I have found that the combination plans really need to be evaluated on a case-by-case basis, because there are so many different ways that the products can be combined. Associations are somewhere between the group and individual. You' have an association sponsoring the coverage for the numbers, but I really feel like it is much more like an individual sale. Typically, you have a 3-5% participation, and I have seen some associations run very poorly because too much weight was given to the fact that they were a group sale.

Finally, let's discuss Internet purchases. Has anybody bought insurance over the Internet yet? I'm doing it right now, partially because I really wanted to see what it was like. I'm in the process of getting some term life, and I went on to a Web site, which was very slick. I picked the company, got a quote, and they even did a front-end medical screen. Two days later I received a 14-page application in the

mail. It even had a page attached to it for the agent to fill out that asked how long he had known me. I wonder how they were going to answer that.

To me, the Internet is still in its infancy, and the tools aren't matched with the distribution channel and the product. Scott has said that some disability carriers are out there, but I think we're going to continue to see more development and maybe unique or different ways of offering disability coverage that can be handled through the Internet.

**From the Floor:** Can you comment a little bit on the minimum group size in some of the multilife individual disability cases, such as what the impact is or what an appropriate level is?

**Ms. Mitchell:** Companies are typically at 20 lives for a minimum today. To me, it's different if you're taking the top 20 executives of a big company versus taking a 20-life company. I think your risk dynamics are going to be very different. Sometimes 20 lives make sense or are appropriate, and sometimes this might not be. That's where the market is.

**Mr. Haglund:** Are the group underwriting participation size percentages? On the multilife sale, I have seen at our company, we've written as much as 800–1,000 lives individual coverage on a multiline. To me, once you're that big that's a blur between group and individual. From the group perspective, if I could get 100% participation on ten lives, that would be acceptable versus 50% participation on 20 lives that I see as unacceptable. It's still ten lives where the participation levels are different. For some of the pure voluntary ones, you'll see carriers down as low as 20–25% as being acceptable. I think that to hit 20–25%, you'd want a larger pool of people, otherwise you are going to have tremendous selection problems. You might have 200 lives at 25%, which is okay versus 50 lives at 25%, which might not be okay. From my perspective on the group side, it matters how large of a group you're dealing with initially and what participation levels you find acceptable. I think most people would think about 50% is okay in almost any situation.

On the group side, you will see buy-out percentages where the employer provides about 50% of the coverage and the employee has an option of buying up to 60%, can be horribly low. On the association side, you might see 3–5% of the people buy up. You might have some selection issues there about people who are buying up. The problem is can you redesign it to encourage the buy-ups so you get a higher percentage of people in that piece of it.

**From the Floor:** How is your company analyzing behavioral macro trends that may be affecting underwriting?

**Mr. Amick:** In my presentation I referenced some effort to use behavioral science to do this, but I can't say that we're really that far along. You get a bunch of middle-class insurance people sitting around speculating about what's going to happen, and in some ways that's informative. You have educated people; claims, underwriting, actuarial, and marketing representatives, who all have their own ideas. You kick the ideas around and try to develop something that's has some

substance to it. I still say that we've got a ways to go in terms of anticipating behavior in the future, though.

**Mr. Haglund:** I would say, as an industry, we've done a terrible job of trend analysis. Historically, we've always gone with the statistics that say, before you turn 65, you might have a 30% chance of being disabled for at least 90 days. But we haven't seen penetration levels really change since the product was introduced.

I think, in general, we've marketed it the same way to people. People aren't buying into the story that we're presenting and we're not encouraging anyone to purchase insurance, so I think there are a lot of things going on that are going to cause problems for insurance companies.

One of the projects I was involved with at Principal was dealing with a futurism scenario planning analysis, which is to talk about what is going to happen. Specifically, we were looking at mortality improvement, with all the genetic studies that are going on now including the genetic manipulations, cancer treatments, heart disease treatments, and diabetes treatments, which are believed to be on the threshold of being cures in the next 5–10 years.

I think our job as an industry is even going to get tougher if, all of a sudden, cancer is no longer an untreatable ailment, where people will not only be in remission, but will also be cured. If they're able to look at some of the cloning or other things that are going on and actually be able to eliminate diabetes as a condition, that would mean changes for our profession. If they are able to repair hearts to the point where conditions are no longer disabling, I think more and more people are going to view disability insurance as something they no longer need because of medical advancements.

**Ms. Mitchell:** If you can figure out what makes people act the way they do, you can get to that antiselection and, unfortunately, I think that the things that make people act the way they do are things that you can't tell about someone just by asking them questions. I do know that some companies are trying to get around that by looking at things like credit ratings and whether the person is responsible in terms of their financial situation. Although questions about regulations come up, I've even seen companies think about looking at things like divorce history and how often someone changes jobs as an indicator. I don't think anybody is really there yet, figuring it out, and I'm not sure that you can figure out why people behave the way they do on an insurance application.

**Mr. Amick:** I'd like to make one more comment on that. To an extreme extent, behaviors are affected by things other than an individual's character. I mean, look at the medical market for individual disability insurance. You have an external change that puts a flame to something that was possibly already there. From that perspective, and from what we've seen in the medical market, we're trying to use products and other tools to insulate ourselves from behavioral changes. That's another way to address that.

**Mr. Kevin P. Farley:** With recent successes in the stock market is there any increased weight given to unearned income in the underwriting process? That, to me, could figure into some pretty severe overinsurance. Perhaps someone has managed a portfolio rather successfully and can continue to manage that.

**Mr. Amick:** That's an interesting question, and one that we've been kicking around a fair amount. For a little while I prescribed to the theory that perhaps some of the conventional wisdom on that net worth and unearned income were wrong. However, thanks to our wonderful actuarial database, the actuarial folks were able to demonstrate fairly conclusively that it is an issue. The problem with underwriting, as it relates to net worth and unearned income, is it's something that can change quite a bit post-issue. You have an attractive clientele and a young professional. They have limited net worth and unearned income, but by the time they become, say, age 50 where you're out there on the morbidity curve, they could have very substantial net worth. Underwriting is limited as a tool at getting at that.