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Session 25PD
Recent Advances in Underwriting Individual Disability Insurance

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Summary: Underwriting individual disability insurance is a complex process that draws on many different disciplines. This session explores some recent developments in the field of disability underwriting that provide companies with new ways of evaluating risks and managing the underwriting process.

The panelists address a variety of underwriting issues, which include new risk-evaluation methods, genetic testing issues, and the use of new technology in the underwriting process.

Mr. Richard L. Bergstrom: I'm in the Seattle office of Milliman & Robertson. I'll be moderating by introducing the speakers—the real stars you want to hear talking about this anyway. One thing you'll note, if you haven't already, is that this particular panel is actuarially cleansed. There are no actuaries on the panel, so these are all individuals with a different background, but one that's very important, obviously, to what we want to talk about today.

Our first speaker is very well-known, certainly, in underwriting, medical, and a few actuarial circles. His name is Hank George. Hank is an underwriter by trade, but at

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Note: The charts referred to in the text can be found at the end of the manuscript.

this point in his career, a published and very prominent public speaker. He wears four hats, basically. His first hat is his professional hat for the company that he works with. He's senior vice president of technical services at Lab One. Lab One is one of the four major testing reference laboratories in North America. His second hat is that of editor-in-chief of *On the Risk,* which is the most prominent global underwriting journal published, and it is the official journal of the Academy of Life Underwriters.

Third, he created and publishes a periodical that comes up about every two months called *Hank's Journal Scan*, wherein you can find probably 15–20 different abstracts of recent articles from the medical underwriting community. Hank is the founder and general chairperson of the International Underwriting Congress. The International Underwriting Congress has convened twice now: once in Mexico City in 1997, and just last June in London where there were probably representatives of 45-plus countries, all there to share experiences and learn about underwriting and risk assessment around the world. And finally, Hank is an author. He has just published the second version of a book titled *Getting It Issued*. This is a book that's really written for agents to alert them in layman's language as to the importance and the value of the underwriting process in getting business issued.

Mr. Hank George: My part of this is to talk about certain areas where we can fine-tune and enhance the risk-management process in disability insurance (DI). And it's paradoxical that I should come here to Vegas from Waikiki, where one of my themes with an audience of Australian honor agents was to discuss with them from an underwriter/producer perspective how the agents can overcome what they described as the horrendous milieu that they have been thrust into in Australiain terms of trying to get business past the underwriting defenses.

I'm remembering now a half-dozen quips or quotes that have popped up in the *National Underwriter*, ever since we found out that doctors shouldn't have their own occupation forever. These quotes are popping up from time to time from learned producers, and they speak in very troubled language about how underwriters are not letting anything through. No one can get disability coverage nowadays; it's just the antithesis of what was true eight or ten years ago when we were competing to write the risks we'd now like to disavow any knowledge of.

In talking to that audience, I was saying basically what I'm going to say to you, but with a different focus. Psychiatric risks present an enormous problem, and that's my area of specialty. Almost everyone in my family is seeing a therapist, so we have extensive background in this domain. Not only are psychiatric impairments the number one cause of LTD, but they represent a particularly unique problem in risk management because, unfortunately, the information givers—that being the clients or the attending caregivers—tend to give us very sparse information.

The world record, in my experience, for most expensive physician's report was a Long Island psychiatrist's report. I remember reading it back in the late 1970s. It said, "Patient doing well." The fee was $150. I'm not really good with math, but it looks like we got ripped off on that one. We have a real problem getting valid

information and juxtaposing that with the dimension of the risk. We are sort of in a catch-22.

To commiserate with the Australian producers and to hold their attention, I tried to characterize for them the underwriting awareness that all psychiatric impairments are not created equal; that if they would go half the distance with us (and I'll talk about how that can be accomplished momentarily), we would meet them midway and do a better and more astute job of gathering information and demarcating the boundaries of a risk. We'd be able to get the job done more effectively, and we wouldn't have to appear to our producers to be so brutal.

I mean, how many horror stories do I hear in the 40-odd producer conventions a year that I do worldwide from producers who write DI about some poor guy? A successful investment executive goes through a difficult marriage and goes to see some sort of counselor variant because he's having emotional problems. Although all the emotional problems may be caused by his ex-wife's attorney, he's still having some sort of problems connected with the divorce. He goes to see the shrink. He's an honest man, he admits it, and he's denied disability coverage, even though his ex-wife's attorney has incentivized him to work harder and longer than he ever worked before in his life.

I try to explain to producers that underwriters are cogent to consider, for example, this much-abused word, "depression." There are at least two genres of so-called depression. There are some scenarios where, against my better judgment, I use the word "exogenous." I don't like to use that word in this context, but it means depression acquired from outside as opposed to "endogenous," which means supposedly arising within because of biochemical mechanisms.

As Dr. Bell would say in a heartbeat, it's never that cut-and-dried. Most people who have biological depression have to be triggered; most people who are triggered have at least some biochemical diathesis or tendency to develop depression or they wouldn't have been triggered.

But, having said that, I think that there are two different kinds of mood disorder, and that extends to depression and beyond. I think that there are some people who are better risks where the life impact is marginal, where the work impact may not exist at all, where there's little or nothing in the way of long-term real medical maintenance, or where you have a patient who probably represents a more desirable risk than what we have evolved an awareness of in the last five or six years in our reactive approach.

I try to tell the producers—and I wish everybody who goes out and communes with the producers would do the same thing—that they can facilitate this process. They tell me, "How am I going to get my clients taking fluoexten hydrochloride (which is Prozac) past the defenses of the underwriting department when he has not lost a day of work as a result of the impairment for which he takes a drug, and has no social isolation or withdrawal from his environment? He is every bit as active in all the spheres of his life, a very motivated person, and a good risk."

Now, how can I get that point across? I try to encourage them, for openers, to take more complicated and complete medical histories. We need to facilitate that with our producers to get them out there acting as our surrogates.

The second thing we need to do, and I think this will go a long way toward making disability underwriting less of a bumpy process, is to make use of a phenomenon which emerged in the 1980s when we got rid of the old street inspection reports where people would knock on your door and ask you questions. Or they would knock on your neighbor's door and ask questions about you. That died in the era of the emergence of the Fair Credit Reporting Act and beyond, when we went over to telephone-mediated inspections, drilling people down, taking the core application, then all the yes answers, and drilling them down with a finite set of additional questions.

That process is being widely adapted to life insurance but is not receiving the same enthusiastic reception on the disability side of the equation. That's unfortunate, because, as someone who has helped design personal history interview questionnaires, I'm convinced that we could do a whole lot with devising state-of-the-art questionnaires which we might ask in a structured interview person-to-person or via the Internet to really help us elucidate, magnify, and add substance to medical histories, thereby empowering the underwriter to use more judgment and not take a very arbitrary approach. We haven't helped ourselves enough in that regard.

The third thing that intrigues me is the possibility of making wider use of pharmaceutical information. It always amazes me how much of a spinal cord reaction there is among underwriters, whether they're in life, disability, dread disease, critical-illness insurance, long-term care, whatever, to always fall back on a superabundance of records from physicians as if none of these issues can ever be settled except if we pore over voluminous documents of medical records, which is a very risk-management slowing event.

I wonder if it might not be possible, even in disability, to get smarter in the area of pharmaceuticals and management strategies, which may transcend pharmaceuticals, to include surgical procedures, and really not have to be so overly dependent on large percentages of business where we secure medical records, thereby slowing the process. I think pharmaceutical records give us a wonderful opportunity, and I think we need to get more knowledgeable in this domain.

I'm going to predict for you that in the next year or two you're going to see an upsurge in keen interest on the part of underwriters and their managers in acquiring knowledge about these areas, because they can apply that knowledge very directly toward triaging risks in the association-group DI area and in the small-group DI area, where we don't have the lavish opportunities to piddle around in the underwriting process as we do on jumbo individual. This could be a particularly good way to get the business moved along.

In fact, I'm so convinced of it that one of my dearest friends and I are going to do an educational experience in exactly this. We're going to see in Chicago, on August 11, if we can take an audience of 50–70 life, DI, and health underwriters, and in 7 hours of intensive education, teach them the basics of using pharmaceutical information, on everything from psychiatric impairments to heart diseases to rheumatic disorders, to herbs, hormone-replacement therapy, whatever it is to allow them to facilitate the movement of risks using pharmaceutical information as sort of a screening, or what Dr. Bell might call a "triage of the risks," saying: "Well, given what the proposed insured has told me on the application, or embellished with a personal history interview, and now knowing how he's been treated pharmaceutically or surgically (in this case, it will just be pharmaceutical), I can make this decision."

I can put a writer on it, and I can offer coverage on some basis. I don't necessarily have to spend the next 18–32 days schmoozing somebody at Kaiser to try to get them to fill out the form. I don't see why that can't be accomplished. I'll bet the ranch it will be. You're going to see more and more interest focused on this in the years ahead.

The one area that really gets me pumped up in all forms of living benefit and death benefit insurance-risk management is identifying risk takers. There's never really been a homogenous consciousness that there are people who take risks, who set themselves up for morbidity, mortality, or both. Those individuals have characteristics that (and you'll love this word) are "measurable." These individuals can be identified, both by commonly recognized and existing criteria such as bad habits, and by novel criteria.

I just saw a study that blew my mind. It was published in an obscure journal far away from insurance. It was a study that looked at the credit-card payment histories of a large cohort of people who owned something similar to a VISA card. The study looked at the correlation between that and adverse health outcomes.

Do I have to tell a discerning audience like this what the results showed? It showed disturbingly how one could predict who the risk takers were, who would wind up with the morbid events or less as a function of answers to questions related to their credit payment history. It almost made me feel vindicated that I started my career in financial services as a Dunn & Bradstreet investigator before I made a deft segue into life insurance. I think we can identify risk takers in ways that are quite novel, and I think you're going to see emergence of this awareness in the next few years.

Now, getting back down to earth, and thinking in terms of what we do traditionally, we're a little bit away yet from asking a series of "how-you-pay-your-bill" questions on the Part II or the drill-down interview. What are the things that we can do?

We can make more use of motor-vehicle records because probably ounce-for-ounce nothing better demarcates a risk taker than motor-vehicle records. I've done a lot of work in this area, reading what amounts to razor-blade-quality writing

in the field of motor-vehicle records. Some of these studies show that there are characteristics of driving and moving violations, not just the starlight stuff such as drunk driving and driving under the influence of alcohol, that influence morbidity. They influence the probability of subsequent events that are deleterious. I'm going to suggest that we haven't scratched the surface yet in our ability to use motor-vehicle records, especially on men, to separate those who are, by their nature, risk takers who set themselves up for traumatic events.

I mentioned the personal history interview before. I'm quite happy to say that lab testing has a role to play in this area. I think that disability carriers, more and more, are selectively using lab profiles. For years, I've been known by my own peers on the life side as Mr. GGT, because if the liver ends, I'm an advocate of using gamma-glutanyl transpeptidase (GGT) as a screening marker for people who not only die, but who abuse alcohol and wind up experiencing morbid events.

I'll tell you one very brief anecdote to fuel your interest. There was a study done in Scandinavia in the late 1970s. It was done in the industrial city of Malmo, a medium-sized Swedish city. The study looked at the correlation between levels of the enzyme GGT and the probability that the individual would die or develop serious consequences from heavy drinking.

GGT was the one little statistic that was never made much of in that study. The whole focus was on death and being a falling-down drunk. It was the correlation between GGT and number of days work loss in a year. Not only was GGT the best marker of all for demarcating people who would miss an exaggerated number of working days (now, there's a word for that—it's called disability), but it even picked the day, and it wasn't Thursday. It was unerringly able to pick Mondays and occasional Tuesdays.

We have the wherewithal to identify some of these individuals. Very recently, the laboratory services side of the business has developed tests called alcohol markers. They're not done in a clinical setting. One of them is just a tab, but for the most part they're pretty esoteric and they use mainly an insurance-risk management.

These are tests that have a very high specificity for drinking. They're not as sensitive as we'd like them to be. Unfortunately, abusive drinking has some of the greatest heterogeneity among the various practitioners, from the steady 3 drinkers who have to have 6 a day to the ones who get their whole 24 in a 48-hour period from Friday to Sunday.

Because there are so many kinds of heavy drinkers, neither one of these tests is sensitive enough to pick up more than, let's say, half. But taken together, there are very few things that can cause the tests to be abnormal other than heavy drinking, especially the first test.

We have developed now a very sophisticated science for taking information suggesting heavy drinking is present. I don't have to tell you that ounce-for-ounce, with one other caveat, heavy drinking is probably the most responsible for excess

morbidity in young adults. And the one caveat that even heavy drinking has to give way to is tobacco use.

I'll end with this comment. It flummoxes me that we do not focus more on tobacco. I mean, I know that most of the individual disability products, although not all of the small-group and association products, are tobacco-priced. Maybe not adequately, but at least there's some attempt at it. Maybe some of the rules are relatively primordial, but at least there are rules. It flummoxes me that we don't spend more of our energy focusing on tobacco, almost to the point of making it a cause célèbre. I mean, if anything creates a sense of esprit de corps with insurance customers, it's the notion that we're finally going to put the monkey on the back where it belongs.

The people who are freely uploading excess morbidity onto themselves by engaging in a practice that's utterly voluntary should pay more, and significantly so, for their insurance than those who do not. I tell this to the health insurance side of the business all the time. I chair a study group of some 35 health carriers, and we sit down for 2 days every year. They almost know what I'm going to rail about when I get in the room.

My biggest gripe against the health insurance industry, the HMOs and others, is their failure to discriminate on the basis of tobacco. If we would just have the wherewithal to discriminate on an issue where all cards are on our side of the table, to use an appropriate analogy in this unfortunate environment, we might get the insurance companies hovering over the tobacco companies at the bottom of the perceived acceptability food chain of the industrial providers, and get them up closer to the banks so the banks can stop gloating and looking at us like an entrée at a cocktail party.

I think that's possible, and one way it's accomplished is by focusing on things such as tobacco use and recognizing that we should be pricing every risk that is feasible according to tobacco use or abstinence. We should have state-of-the-art guidelines that reflect reality in the domain of tobacco. And finally, we should be screening all those individuals to find out which ones suffer from that tragic neuropsychiatric illness that I, years ago, dubbed "smoker's amnesia."

From the Floor: For the GGT, are there any issues, if you were to price based on that, for discrimination? For instance, on the life side you have some states that are really uncomfortable with a different pricing for sex-distinct.

Mr. George: No. To my knowledge, there's nothing about GGT that will get you in trouble with any known interest group except former Alcoholics Anonymous members, and I don't think that's an interest group that's going to hurt us too terribly much. The life side uses GGT rather aggressively. Not as much as I'd like, but, hey, it's an imperfect world.

Mr. Bergstrom: Our second presenter is Dr. Pete Bell. Pete is the senior vice president of risk selection and medical director for ING Reinsurance. Dr. Bell joined

ING in August of 1999 and is charged with leading the medical risk-management practice, which is underwriting and medical, as well as heading up the mortality research center. Board certified in internal medicine, Dr. Bell earned his M.D. from Tufts University of Medicine and completed his residency at the Maine Medical Center. He also holds an M.B.A. from the University of Southern Maine. Always active within the industry, Dr. Bell serves as immediate past president of the American Academy of Insurance Medicine; he's a Fellow of the American Academy of Disability Evaluating Physicians and is a faculty member on disability for the triennial course in life and health insurance medicine.

Mr. Peter Bell: You might wonder why a life insurance medical director and somebody who's in charge of risk management for a life reinsurer is talking about disability. I have had some experience.

I was struggling a little bit with how to organize this information in a way that could, hopefully, be meaningful for you all, and, initially, I was charged with laying some foundation for thinking about disability underwriting. And from that approach, I usually like to start with a case study. Now this is in no way intended for us to come up with an answer for appropriate underwriting action to take on this case, but simply to illustrate some principles as we go along that we'll develop.

The case that we put together was a 45-year-old male who's applying for $15,000-a-month DI. Granted, it's tough to get that these days. This was actually a case from my previous experience, back when you could buy that much. He was a plastic and reconstructive surgeon for about 12 years. He had a verified income of $600,000 a year for 3 years. He was on a second marriage and had a history of a sprained back a couple years ago.

With that as a background as a case, I'd like to develop some principles of disability underwriting. The first thing that is really critical, whenever I talk to audiences about disability, is to get clear about what we're talking about when we talk about disability.

At last count, there were five major disability systems in this world of ours. I characterize ours as the private disability system, but there's also Social Security and workers' compensation disability. The fourth is the World Health Organization (WHO), which actually has a definition of disability. The fifth one is the Americans for Disabilities Act (ADA).

Each one is actually defined differently; some of them are defined as actually having no impact upon work at all. The WHO's definition of disability has to do with a definition that was designed for the tracking of data for the various countries in the world so that there could be a common language on what the data meant. If you look at that particular legislation, the ADA was developed as civil-rights legislation to promote people with impairments returning to work. I would much rather they title it the Americans with Impairments Act, because it's the antithesis of what we consider when we think about disability.

In the private disability industry, we're thinking about people who can't work because of some kind of medical illness or injury. The ADA is actually just the reverse of that. The first thing to do is to be really clear of what definition of disability you're talking about; since we're talking about private disability, I chose, "an injury or sickness that prevents the individual from engaging the material substantial duties of his or her regular occupation." It's a fairly standard generic definition that you would see in an individual disability contract, pretty similar to what you might see in the LTD contracts as well.

If you're underwriting these risks, it's always important as the person doing it to think about what risks are being assumed. It breaks down into three areas. There are financial, occupational, and medical risks. I'd like to develop each of them a little bit.

The financial risk for DI really could be one of three types of financial risk, particularly in the individual disability business: income replacement, which is really trying to insure the risk of loss of earned income; business overhead, which covers expenses; and buy/sell arrangements, which are really based upon the valuation of the business the individual is involved in. It becomes very critical for the individual underwriter to understand how each of these are assessed.

Likewise, if you flip over to the claims side of the operation, it becomes very critical for the claims person to understand the accounting for each of these various pieces. In many cases you'll see people who have a large amount of unearned income, particularly with the valuation of the stock market over the last five years, which is not what's being insured. It's really critical that the individual who's looking to do the underwriting understands all the nuances around financial underwriting.

The second risk is occupational. I like to think about this as occupational duties versus an occupational specialty. You tend to see the occupational risk more in the group business, but you also see it in the individual business. Is it the job versus the occupation? What is the person's job? Where do they go to work every day? Whom do they work for? Who's their boss? We usually don't get into those kinds of details on the underwriting side, but I can tell you on the claims side that information becomes very critical because sometimes claims are filed initially because of a medical condition, but as you really begin investigating it has a lot of job dissatisfaction and that the person actually has the ability to do their occupation.

The specialty piece really has to do with GAY OCC and OWA OCC definitions, and by and large that's a group concept. The medical risk that's involved in DI I break down into two components: the duration and the severity. The duration has to do with what we in medicine call the natural history of disease. What that simply means is, what happens after a person gets sick? I'm going to develop this a little bit more, because I think it provides a good framework for applying underwriting principles.

The severity actually has to do with how impaired the individual is. And that has to do with a concept we call functional capacity. Just to jump back to the different definitions of disability, you wouldn't necessarily have these concepts if you were thinking about workers' compensation or Social Security DI. While you may see some of the same words, these types of insurance are applied very differently. The severity issue is critical. We used to have a saying in the organization I worked in before that "diagnosis does not equal disability," meaning simply because someone has a diagnosis of coronary artery disease that does not mean that that person's disabled.

I'm going to develop that just a little bit further. I'm thinking a little bit about claims, but it applies also to underwriting. The risk that we're insuring is that the person has lost functional capacity because of that diagnosis, not that he or she has a diagnosis, whereas, in Social Security, you are disabled because you meet a certain listing, meaning you have a disease that's on the list. In that case, a disease or a diagnosis does mean that you're disabled.

In our world it doesn't mean the same thing. But everybody starts with a diagnosis. The standard one that I like to think about for illustrative purposes is somebody with coronary artery disease. Coronary artery disease, as you may know, usually presents itself as a blockage of one of the arteries that supplies blood to the heart. Now it can manifest itself in a number of different ways. It could be a heart attack, angina, or congestive heart failure. That basic underlying medical condition of coronary artery disease can show up in the individual in a number of different ways.

But simply having had a heart attack does not necessarily mean that you're impaired. What you're really trying to do as your next step of sorting through this is to decide what is the impairment. What is the loss or reduction of function because of that particular illness or medical condition? If it is a heart attack, you can visualize the impairment in a number of different ways. They can be impaired by chest pain, shortness of breath, or exogenous depression (to use Hank's term) that results from having a major illness and having to suddenly deal with mortality. A person can be impaired by the palpitations that he or she gets from arrhythmia. There are a lot of different kinds of impairments that come about from that diagnosis, or a person may have no impairment at all. The person may have had a heart attack and fully recovered.

If you do have an impairment, we like to characterize it around restrictions and limitations. Once you have done that, then you can make a pretty good statement around why that is that person's functional ability or capacity. We like to distinguish between restriction and limitation not to make a pure academic exercise out of the process, but because there is value in doing that.

A restriction is an activity the individual should not do because of the risk of delayed healing or a safety threat to oneself or others. A classic example of a restriction is somebody who has a newly diagnosed seizure disorder. For a person with a new seizure disorder, in all 50 states and in most countries throughout the world, the

first thing that happens is the person loses the ability to drive an automobile not because they can't drive—they can still get behind the steering wheel, start the engine, and press the accelerator—but because it's not safe for them to do so until you're certain that that seizure disorder is under good control. It varies by legislative district and jurisdiction. Some jurisdictions let you drive after six months of seizure-free steady, constant medication use, or being off medication. In some states it's a year. There are even some that require you to go two years before they feel it's safe to drive. That's a very valid restriction.

Everybody in the world agrees that that person should not be driving an automobile. And if driving an automobile was a significant occupational task of a person's occupation, then that would be a valid restriction affecting that person's function and capacity to do that particular occupation. Contrast that with a limitation. A limitation is an activity the individual cannot do because he or she has an anatomical or a functional loss. Again, the classic example of that is if someone has an amputation below their knee because of their diabetes. Well, if you've lost part of your leg, you can't stand up. You've just lost the ability to stand. Now, ultimately, most people with below-the-knee amputationss can be rehabilitated and learn to function very well with prostheses, even to the point of running marathons.

But during the immediate loss of that lower limb, they've lost the ability to stand or walk, and, again, if they had an occupation that required those particular tasks, they have a loss of functional capacity. The easy way to remember this is that limitations are loss-related and restrictions are risk-related. What is it that we really insure? Where am I going with this information?

If we look at functional capacity and how functional capacity varies over time, typically what we'll see is a pattern that could look like Chart 1. The higher the amount on the y-axis, which is functional capacity, the higher you go on the graph, or vice versa—the lower the amount, the lower you go on the graph. Admittedly, it's a conceptual graph; there are no numbers attached to it.

You have an individual who starts out on the intersection of the y-axis with a certain level of functional capacity. You and I go to work every day reasonably healthy. We may have some aches and pains, but we have a certain level of functional capacity. Then some illness or injury happens. You get hit by a car, have a heart attack, develop a seizure disorder, or develop depression. That functional capacity decreases and goes down. Now it can go down in a number of different patterns. Chart 1 describes a sloping-down pattern. If you got hit by a car it would be an acute loss, so it would just go straight down.

Then one of three things happens: you either get better, stay the same, or get worse. Ultimately, if you get worse, you're dead. If you get down and hit the x-axis, you're never going to recover. If you draw a line that represents the functional capacity required by a particular occupation or the occupation of the subject, now you've taken that natural history of disease and put it into an occupational setting. The way we like to think about it is if you're above the red

line, you have adequate work capacity. If you're below the red line, you have inadequate work capacity for that particular occupation.

You can do all kinds of different scenarios with this. You can raise the red line, or you can lower the red line. That's kind of how the GAY OCC/OWA OCC definition works on LTD policies; the GAY OCC has a lower red line because it has a less stringent occupational definition. In that case, if you lower the red line, you have a few people who actually have work capacity because of a change of definition in the contract. But conceptualizing it this way allows us to begin to think about how can we apply disability underwriting principles. How can we apply the actions that we have available to us where we're trying to assess the risk to the natural history of disease, and what happens to people when they get sick?

I like to think about these four elements of disability contract in the private disability environment. These elements are contractual, financial, occupational, and medical pieces. The occupational and medical pieces taken together define work capacity. For individuals to be declared disabled, they have to meet all four pieces of this contractual definition. Contractual means that they were eligible for benefits, and that they've had a contract that was valid that defines the occupation they were in.

The financial piece means they paid their premiums, and they've gone through the appropriate financial underwriting—the financial considerations of claim time that calculate benefits. The occupational piece has to do with work duties and work tasks. The medical piece has to do with the functional capacity we just described.

It's absolutely critical to conceptualize work capacity because once claim time occurs, it's important for underwriters to know what claims people do. Once claim time occurs, this is by and large the issue that has to be resolved. Once you've gone through the financial calculations for the benefits and the eligibility requirements, then it comes down to work capacity. The work capacity is the functional capacity within the occupational setting. It really boils down to filling in four blanks.

When I used to be in disability, I used to pound this into my medical, rehab, and disability benefits staff. If you can answer these four questions in Table 1 or fill in the blanks, you have a real good understanding of what's going on at claims time.

TABLE 1

The Essential Issue of Work Capacity		
The Individual:		
CAN NOT or SHOULD NOT do		***something occupational***
because of	***Something Medical***	

If it's important to the claims examiner, it's vital to the underwriter. Underwriters need to understand these concepts as well. The individual cannot or should not do something occupational because "cannot" is the limitation and "should not" is the restriction. Once you can establish those with the medical information, because of a specific occupational task, it has to be driven by something medical.

The "something medical" in Table 1 is really critical because in many cases (and this is where the sharp underwriters really hone in on this) the "something medical" sometimes isn't medical. The risk that you're assuming really has to do with the other factors that are going on in the individual's life.

We talked about issues around job dissatisfaction. If you think back to the case we introduced, there were some factors in that particular case that might indicate some lifestyle changes are coming about that might make the underwriter think a little bit differently about that case. It's probably not going to be the kind of information that says, "Yes, it's going to come out this rating," or, "Yes, we're going to apply this exclusion." But in many cases, you're on the fence around what you want to do.

As you look at the case in total, when you begin to try to get the full picture, it can help lead you in your decision whether this is something to issue or whether this is something that you want to walk away from.

I want to talk just a little bit about the components of risk related to work capacity. I think about them in three ways. What are the actual components of risk? What are the perceived components of risk? And what are the uncertain ones? The goal is to deal as much as you can with the actual components of risk because that's what we can price and underwrite for.

But you have to bear in mind that there are these other vague things that can occur. The actual components of risk are the things that we have been talking about. They have to do with the restrictions and limitations of the occupational duties. Those are generally pretty straightforward things: issues around work dissatisfaction and issues around awareness of mortality. I can't tell you how many situations we've seen where a person had a fully recovered heart attack with just the evidence of a scar left on his or her electrocardiogram or echocardiogram, who was able to do 14 METs, which is like running a marathon on a treadmill. I don't

know if any of you have ever been tested, but it takes you a week to recover from 14 METs if you're out of shape. The awareness that that person suddenly is faced with a mortal disease changes his or her perspective on going back to work. And it's an important consideration. I tried to build life dissatisfaction, job dissatisfaction, and marital issues into that case.

Finally, the areas of uncertainty. One of the big ones is the area of self-reported conditions. You're beginning to see, particularly in the group contracts, limitations on self-reported medical conditions, which, if nothing else, has given job security to medical directors for the next five years in trying to help claims departments interpret what a self-reporting condition is. But they're put in there because there are certain medical conditions, such as chronic fatigue syndrome, chronic pain syndrome, and fibromyalgia that are by nature self-reported. There's nothing specifically measurable about them that allows you to decide what the appropriate restriction or limitation should be, so it's difficult both on the clinical side and the underwriting or claims side in taking care of those insureds.

In fraud, the whole area is of uncertainty. That actually was a case that I saw. I don't think it was actually for $15,000, I think it was probably more for $2,000, and it was actually one of the first claims cases I ever saw when I went to work in the disability business 10 years ago.

What was fraudulent about it was that this individual was a physician, and he was claiming a disability related to his diabetes. When I saw the case, I got all excited and said, "Well, wait a minute." The insurance had just been issued three or four years before. I said, "This guy knew he had diabetes." I looked at his underwriting application and he answered all the questions "no." He applied for just enough insurance so that he didn't come under the testing limits, and, in retrospect, he had had diabetes since he was 17 years old. He chose not to disclose that on his application.

I got all excited about it and went to the benefits specialist and said, "Well, here is outright lying; it's clear." He had waited to file his claims until the contestability was over, and there was no fraud language in the contract. Fraud is one of those uncertain things, and it's very difficult to have an awareness of it at underwriting time. Many underwriters develop a certain level of skepticism. It's almost as if they all came from Missouri—you got to "show me" before they will feel comfortable with the actions they have to take.

Just a couple more points. Many of us are involved in life insurance. One of the things about life insurance, as we relate it to the natural history of the disease, is we like to understand the pattern of mortality. I thought a way of illustrating this, to segue into the disability component, was to look at the natural history or the pattern of mortality related to cancers and the standard underwriting actions that are taken related to malignancies, which are taken from malignancies in the life insurance world.

There is a Life Insurance Risk Model published in *Medical Selection of Life Risks* by R.D.C. Brackenridge and W. John Elder that shows two curves: the normal mortality pattern and the pattern that you see with people with malignancies, where there's very rapid drop-off on survival early on in the malignancy. There's an elbow in the curve, and then the curve tends to flatten out and parallel the normal curve.

For the underwritings that are typically and standardly taken, life insurance is postponed if you're in the early part of the mortality curve. Extra premiums in the range of flat extras are typically charged in that elbow period, and then if the curve parallel is normal or approaches normal, either just a rating or ordinary rates are charged.

The point here is that you can look at the mortality pattern of the particular illness, and you have underwriting actions that you can take. Well, if you think about life insurance, the risk that's being assumed is a mortality risk; the financial component is generally to cover assets. There are more avocational components that you think about rather than occupational components. The proceeds go to a beneficiary. The benefit is usually a lump sum, and the underwriting options are at an accept/decline rate of some kind at a flat extra.

If you look at Chart 2, you can use this same kind of thinking or modeling to apply underwriting principles.

In disability, just to frame that up, you're underwriting morbidity rather than mortality, income rather than assets, and more occupational issues than avocational issues. The proceeds usually go to the owner. It's usually a stream of payments unless it's a lump sum like a buy/sell. But there are more underwriting options on individual DI: accept/decline rate, elimination period, benefit period, and exclusion.

Chart 3 has kind of the menu that you can apply. The way that I like to think about this is if you look at our pattern of morbidity, if you craft an exclusion, say, as in our first case, with the low back pain of two years ago you could put an exclusion on that policy for diseases or disorders of the low back. If the claim is filed for low-back disease, that would be almost as if the person never crossed the red line because it's excluded. Even though it happened, it would not be a covered benefit under the policy because it's excluded.

That kind of underwriting action really affects the first crossing over the line in terms of more capacity. Elimination period is the same thing. Another way of sometimes handling low-back pain or muscular/skeletal low-back pain is to lengthen the elimination period. The idea is the person is more likely to have recurrent minor back injuries, but he or she will recover in the 90-day period. Again, that would be as if he or she never crossed the red line and never lost work capacity.

Benefit periods can be lengthened or shortened. Benefit periods typically are tied to ratings, so that if an additional rating is charged over a certain period then the

benefit period is reduced. Then finally, there are the contractual provisions that typically apply—things such as war and sometimes suicide provisions. There are a number of risks that you must think about in underwriting DI that are distinctly different from other types of insurance.

Mr. Bergstrom: That was very unique. I like that. Our final speaker is Jim Kern. Jim is the director of disability underwriting at Northwestern Mutual. Jim has a B.B.A. from the University of Wisconsin. He has completed six of his CLU exams and all of his LOMA exams. He joined Northwestern Mutual as an underwriter in 1969 and has worked for that company ever since. Jim is going to give us his view on underwriting aspects.

Mr. James B. Kern: In June of 1998 Northwestern Mutual created a separate disability income department and at that time pulled together all of what had been part of functional departments. That new department now includes claims, marketing, product development standards, and the underwriting function. Prior to the formation of the disability income department, underwriting was part of the new business department, both life and DI, and part of a four-regional structure setup where the people heading one of the regions were responsible for both life and disability income.

With the formation of the disability income department, all of the responsibility for DI underwriting now rests with the director of disability underwriting, which is myself. At times, as part of that reorganization, I feel like I've drawn the short straw in the deal because, as I've quickly found it, being director of DI underwriting has more than its set of challenges compared to, say, the director of life insurance underwriting.

With that move to a separate disability income department, we've really taken a fresh look at a lot of our processes. I think what a lot of companies are trying to do constantly is look at what they can do to improve that process and to, where possible, eliminate some of the doglegs and whatnot that make the process a very complex and, at times, onerous effort without sacrificing the real benefits of quality risk selection.

With that said, I'd like to share with you three initiatives that we've launched or soon will launch in the underwriting area to see what we can do to improve that process while still maintaining the high benefits that come with quality risk selection. The first initiative is a preapplication underwriting service. This is where we are trying to get agents to work with us before they take the application. The second is the formation of a large-case DI division that is going to pull certain pieces of business into one dedicated underwriting division. Then the last one is a process that we're just beginning that's going to be a three- to- four-year effort, and we're calling it a Simplified New Application Process. It goes by the acronym SNAP. This will be our venture into teleunderwriting and, eventually, e-applications. Who knows where that will take us.

By offering preapplication underwriting services to the field, I think we're stepping back and recognizing that DI underwriting, even much more so than life insurance underwriting, is very complex and often very challenging to an agent to either pick the right occupation class or pick the right amount based on all the circumstances. The service will also prepare the client for whether or not there might be a problem, and then better set the stage for placing the case. These services are intended to give agents help, again, before they take the application.

The two that I want to talk about are the informal inquiry process and a general question line. They're borne out by a couple of numbers. In 1999 more than 11% of our applications ended up with what we call "other changes." And 4.5% of those involved occupation change, where the agent, again, picked the wrong occupation class and we had to change it. In addition to those changes, we declined roughly 18% of applications; about 11% were medical or lay declines, and the other 7% were incomplete.

Those applications were, in effect, frustration points for the agent and, in many ways, possibly pieces of business that he or she saw nothing in return for, so what we're trying to get at with this preapplication service is to try to make some inroads in that area.

Now for the specifics on how it works. We introduced this in the fall of last year, so we're just getting some experience with it. We have two areas where we offered the process. One we call the occupation class inquiry; the other the financial inquiry. It's available to all agents to use to work with us, again, before they take the application. The goal, if you will, is to have the agent give us limited information and then we, in turn, will quote to him or her on a tentative basis what that occupation class is. Again, this is before he or she takes the application.

The end result would be that the agents will be less frustrated than they are today, whereby they apply a particular occupation class or a particular amount, and then during the underwriting process we come up with a different opinion and a different occupation class or amount. Now the agent has to resell that case.

That leads to a certain amount of frustration and agents sometimes get to the point where they find the process just too much to work with and therefore stop selling the product. From our perspective, we think it can reduce our handling costs, in terms of not reworking the case or sometimes not handling a case that is going to be insurable on any basis, so if we can make inroads into that, that's a positive for us. We think it has some win-win potential.

In terms of exactly how it works, pretty much here the agent completes a one-page inquiry where we ask for limited information from the agent. For example, on the occupational inquiry, its various sets of questions tell us what the applicants do, the percentage of time, and all of those kind of things that you might get on an application, but given that we have six different occupation classes, and I'm sure every company has similar things, it's not always easy to hit the target. If you're an engineer, that's simple, but if you're a businessperson with a particular title and

you spend *x* percent of time doing physical activities, that's where the problems come in.

Agents tend to be optimists. They always apply for the top class. Underwriters tend to be pessimists. We pull them back to the center line. What we say to the agent is, "Give us limited information, fax it to us, we'll have an underwriter look at it, and basically we're going to promise you a one-day turnaround time and we'll come back and quote a tentative occupation class that you can now take with you before you take the application and quote the right occupational class."

The same thing applies for the amount of coverage. The agent will give us limited information, send us, if he or she can, W-2s or certain financial statements, along with other particular information. We'll analyze that and we will quote the agent what the client is eligible for, based on that information, so that the agent can illustrate and take the right amount of coverage and avoid that frustration and hassle that goes with what happens after the fact. Again, there's a potential for a win-win situation.

We started this in the fall of 1998 and we've had some pretty good success stories to date. For example, in the buyout cases, we found that agents hit the wrong amount better than half the time, because if they don't do a lot of them it's a fairly complex product. We've had agents send us the information in advance, and we quote them what it is, and they've seen a complete turnaround in their attitude with the problems with underwriting, if you will, based on this service.

Other examples would be where we find out that somebody, frankly, isn't insurable, based on particular information. And while that isn't a positive from the agent's perspective, they appreciate that more than going through the process of taking the application and sending it in to us back-and-forth then one to three weeks after the fact finding out it's not insurable. From that perspective, it's been successful. And again, from our perspective, it certainly has some cost-savings potential.

The second service that goes hand-in-hand with the inquiry process is what we call a general question line, where we, again, encourage agents to call us before they take the application. This isn't quite as extensive as the occupation in financial inquiry, because we don't ask them to send us information, but basically, if you, Mr. Or Ms. Agent, have any questions about this, that, or the other, or how it looks medically or whether it qualifies, we encourage you to call us before you take the application.

The goal here would be similar to what the inquiry process is, which is we want to improve the quality of that application, because to the extent we can improve that, then we speed up the process and reduce a lot of the frustrations that take place currently. We also like to think that we can set better expectations or more realistic expectations with the client.

For example, if we uncover during this process that there's a knee history, we can tell the agent that in all likelihood it's going to include an exclusion rider, so prepare

your client while you're taking the application for this. And that, many times, sets the stage for a successful delivery of that policy, as opposed to the way it can work where you find out days, weeks, and sometimes months later, and now you have a complete resale job on your hands. And the last point would be the improved cycle time that takes place when you've solved and resolved some of the problems at the first stage rather than the second, third, or sometimes even the fourth stage.

Next, I'd like to switch gears and discuss the second issue that I said I would talk about, and that's the large-case division in the DI area. This is following a company response, a company-wide initiative, if you will, to recognize our top-producing agents. In 1999, on the life insurance side, the company created a specialized set of services for top-producing agents. And we in DI are now going to follow through with our response to that. What it will be is a separate division that's going to process certain segments of the business.

In DI underwriting, we currently have two divisions. Basically we are set up on a geographical basis, east and west, and we process all of the business from all of the agents on that geographical basis. Now, in July, within the next two months (we're just finishing up the work on it), we will create a third division and carve out of that current geographical setup the large-case division, which, again, is going to recognize what we think is the value that comes from your company's top-producing agents. Again, this will parallel what is currently in place on the life insurance side.

Each year there is a recognition dinner set up from our perspective for the company's top-producing agents on a premium basis. That's roughly 250 out of our 5,000-plus agents who we currently have selling. All of the agents' DI business is going to be processed by this division. In addition, we will put, just for the DI operation, a DI-specific focus on it, and include all of the business from our top 30 DI-producing agents who have not already been included under the first definition.

We're also going to include all the guaranteed standard-issue business. This is a highly specialized market; it's a large-case, employee-sponsored market, multilife cases, and there are certain agents who tend to work this market. It's fairly specialized, and there are advantages to having relationships from both sides to process this business. Then we'll have a large-case component, too, and this will be all underwriting amounts over $10,000. All of that business, if you will, is going to go through what we're calling our large-case division, which should be in place by July.

As far as how the division will be organized, it's going to be a dedicated underwriting division within our overall underwriting operation with a focused leadership, both administrative and technical. It will be staffed with some of our more experienced underwriters. At this point, it looks like it will be 12 underwriters, plus the leadership that makes up this operation.

As far as the services, there is no change in underwriting standards or application standards for business that goes through. In other words, a case will stand on its own merits whether it goes through the large-case area or the other geographical areas. If there's a medical problem or a particular issue, that's not going to be compromised in any way. What the division is going to emphasize is that there's going to be a high-touch service component to it. The service standards will be enhanced. That will be the sizzle.

For example, our goal will be to process all requirements that come in on a given day, same-day-type response to requirements received, phone calls received from agents, links that we get from agents, or any type of communication. We'll have prioritized services from the support area, medical staff, and CPAs who give rounds to the underwriters. Those will be handled on a prioritized basis.

The second point is the agents are going to have increased access to underwriters. We have a screening system whereby we have underwriter assistance to try to answer calls, but for this particular segment, again, recognizing the caliber of agents and the type of business, it's going to be a much softer screen, and if agents need to talk to underwriters, we're going to have more and direct, immediate access to them.

We're going to encourage proactive calls from underwriters. If they see a case and it looks like it's a problem that the agent hasn't anticipated, we're going to encourage them to pick the phone up and talk to the agent so that they're better prepared to know what's coming and to try to eliminate the surprises.

And the last point up, this follows the company initiative in this area, is a toll-free service that will be available (as it is now on the life insurance side) to the top-producing DI agents also. The payoff, if you will, out of all of this, and it's been supported by what we've seen on the life insurance side, is that better service is a circle of success. The better service will create more loyalty on the part of your field force, and that will result in more and better business that ultimately gets placed on the books. It's what we've seen with our life insurance side, and we think we have the same potential with the DI product, again, with this high-touch service.

The last item I want to talk about and discuss is more of what I call a long-term initiative that we're just set to start in the second half of this year for both, again, life and disability income underwriting. As I mentioned before it goes by the acronym SNAP. The drivers that caused this project to move from the idea to the formulation stage was that a review of our current process showed that we did need to improve our underwriter's cycle time. We measure the cycle time from the time the client takes the application, which is when it starts from the client's perspective, to when we ultimately deliver the policy. It's a rather lengthy process today, and one that we feel we have to improve and drive down.

The second item would be just to improve the overall efficiency of the underwriting process. The current process is a very sequential process. You get pieces of

information step by step by step, and you react to it along the way. For example, you get a paramed exam that might be part of the application. That uncovers one set of issues and you go off and get what you need. Now you do the telephone history interview, maybe seven to ten days down the road, that uncovers another set of issues that generates another set of requirements, and on and on you go. This recurs many times over days and weeks. This project, if you will, is aimed at trying to improve that.

The third point would be field productivity. As I mentioned before, agents are oftentimes frustrated, and any of us in the underwriting operation knows that that's never going to go completely away, but to the extent that we can modify it or reduce it, we think has significant potential, particularly with the disability income product, where there are more opportunities, if you will, for frustration. We think if we can reduce the agents' time in the underwriting process that they will then have more time to do what they do best, and that is build relationships and make sales that ultimately end up being placed on the books.

The last point would be competition. I think every company out there is looking at these very same issues, and I think there isn't one that isn't looking for ways to either simplify or speed up the process, so this is an effort for us to maintain and stay pace with what's happening in the industry and all companies.

The key elements of the SNAP process will be a more simplified application than what we have today, which is going to ask, at least at the initial application stage, for less information and include fewer forms and fewer signatures that are taken at that first step.

The key point of the whole process is the second part—the client history interview. This is the telephone interview. It will be conducted from the home office as really the first step in the process after we've gotten legal authorization from the application itself. But this will be done seven to ten days sooner than what happens in today's process. Again, the interview (I think Hank talked about this as part of his presentation) will have the drill-down and reflect some questions asked by the interviewer, who, again, will be a skilled individual trained by the home office and have the skill set necessary not only to ask the questions but to know when to go into additional detail.

An example would be, from the DI perspective, if you find out there's a back history, you're going to go automatically into the detail and collect all of the information that you need at that point in time, or any other impairment. We'll have a complete set of dedicated drill-down questions that will get asked, whatever we get at in today's process, but unfortunately it's days and weeks after the process is started. The intent with this interview will be to collect as much of the medical and lay information as you can, while you have that client on the phone. I know it may sound like it's going to be a long time, but we're thinking a 15- to 20-minute interview. Then that information will be compiled and mailed to the client for his or her signature, just to verify that that information is accurate and correct.

The process addresses both field and home-office concerns that are part of today's underwriting process. From the field perspective, the process should result in what we're calling less redundancy in gathering underwriting information. Rather than asking similar questions twice—for example, on a paramed exam today—the paramed examiner asks a whole set of medical questions. That application comes into the home office; a step that I think almost all companies have and we have. You then do a personal history interview, which is the telephone questionnaire, but guess what? We ask the same questions in many situations again. And that's a criticism we get from the clients today: "Why are you asking me that again? I've already told somebody along the process."

This process, we feel, has the potential where we will ask it once, it will be by a skilled individual, and we will do our best to collect all of the information at that first step. It relieves the agent of certain tasks. There's a lot of times where the agents and/or agent assistants spend the day either collecting underwriting information or going back to this, that, or the other. We think this process has significant potential to reduce that; therefore leaving the agents with time to do what they do best, and that is to make, hopefully, additional sales.

We think, based on our analysis, that the cycle-time reduction has potential to eliminate seven to ten days on our current cycle time, based on the fact that we're going to get information much sooner in the process and order those requirements a week to ten days earlier than they're ordered today. Then, last, the whole thing should end up, we think, feeling like a more client-friendly process than today's process.

As far as the home-office perspective, we think it has significant benefits for us, too. We think the classic win-win here. From our perspective, we think it's going to improve morbidity, as a result of collecting better information than we get today. As I mentioned before, the interviewers are going to be trained by the home office; they're going to have a skill set, we think, that's going to be near an underwriter's level and expertise. As a result of that, they're going to be asking the appropriate questions and collecting that appropriate information at that first step in the process. It's going to be more complete information.

When the underwriter gets the application today, they only have limited information in front of them—the paramed exam, for example—and then go off of that. This situation should give the underwriter a more complete package at that first step. And we think, therefore, that it's going to be a more quality-initial review than what takes place today.

And then, finally, there's a need for better expense management. We'll be able to better focus on getting requirements that are necessarily based on what information has been collected, as opposed to what today are many discretionary requirements that get asked for because of incomplete information or questions raised by the lack of total information. We think out of this we can do a better job of picking and choosing and slicing and slicing, if you will, and then focus in on what requirements, in fact, are needed.

Our plan, in terms of kicking it off, is, unfortunately, already outdated. We'll start a limited pilot in June 2000. That was the plan until last week. We've had some technical issues with our information services' people who are designing parts of the system. That's now been pushed back to the fall of this year. I think in late September or early October we will start the limited pilot. And what that pilot is going to involve is paramed business, again, for both life and disability income. We're going to start with one of our agencies and then, hopefully, expand that off as we get started. Then a broader rollout is planned for the following year in 2001. As I said before, this is a long-term project that will stretch three to four years, but ultimately it will take us to an electronic application and electronic transmission of requirements and, we think, a complete reengineering to some extent of the underwriting process as we know it today.

Mr. Timothy P. Swankey: Jim, I have a question on the formal inquiry process. I know a number of agents who would consider a one-day turnaround about one day too much. It seems like you could develop a rules-based software which would take care of the occupational class and financial inquiries so that they could get answers to that while the prospect is still in the office. Is there anything to be gained by having it reviewed by the underwriter?

Mr. Kern: Yes, good question. We do have a system along the lines of what you talked about, an occupational locator in the field, but we still find it's only as good as the information the agent loads in, to give out the answer. We've had some success with that. This is intended to be a service, I guess. I don't think whatever information we load in is the problem; it's dependent on what the agent puts in. And that's, I think, where the challenge steps in. What this has allowed us to do is, once in a while, we'll get the information in, and if it's really critical, we'll call the agent the same day, for example. And if we have questions, we'll pick the phone up and talk and get it resolved, but we've still found just by having more information that we can react to that we're still giving a better answer than the software-loaded system that we have. But it's a fair question and one we'll keep at, I think, from both perspectives.

Mr. Bergstrom: I have a question for Pete. When it comes to claim time, who determines what the phrase "substantial duties" means?

Mr. Bell: In the previous organization that I was in, the person who had that final decision was the claims examiner. Many times, through a conversation with the employer or the individual themselves, that can be determined. Occasionally, a vocational rehab person would be involved, and there are some fairly standard definitions of occupational tasks, so most of the time it was fairly straightforward with the claims examiner having the final decision.

CHART 1

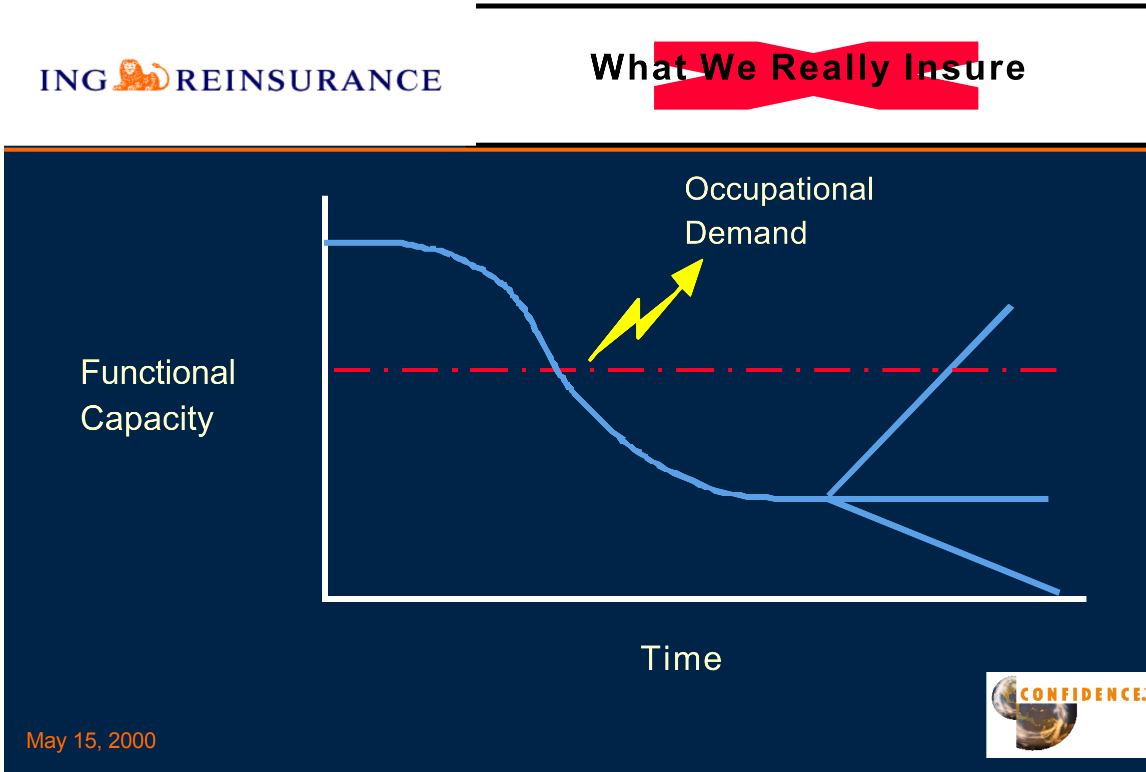

CHART 2

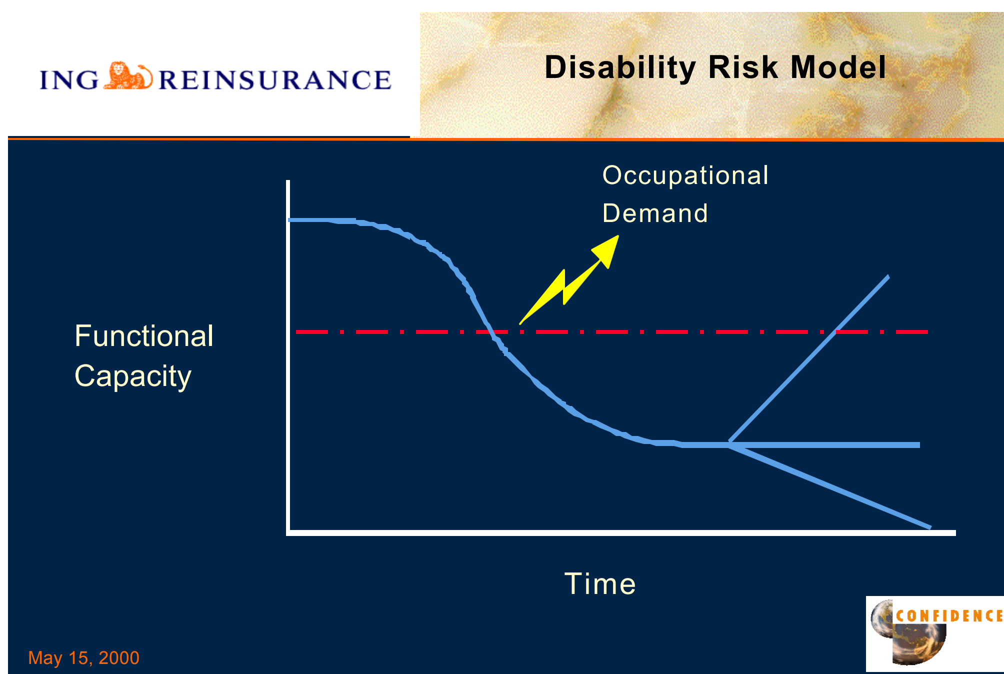

CHART 3