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METHODS OF UNDERWRITING AND CONSIDERATIONS IN PRICING

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MR. CHARLES E. MOES, JR.: I'd like to take this opportunity to briefly climb upon my soap box and try to elevate your collective consciousness a bit. Our broad topics are underwriting and pricing. These are matters which are central to the success of our business careers as actuaries in the insurance industry.

The ability of insurers to discriminate between good risks and bad risks, between healthy risks and unhealthy risks, is crucial to the proper functioning of our product. I believe that our abilities to fairly discriminate between good risks and bad risks are under attack. Perhaps I should say good risks and not-quite-so-good risks. What is worse, I believe that the overwhelming majority of actuaries are complacent regarding these attacks, and this complacency

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frightens me a great deal. I hope that my brief introductory remarks will serve to shake up any of you who may be the least bit complacent.

I took a Business Law course while I was an undergraduate at Drake University. I still remember numerous bits and pieces of discussions that took place in that class. One thing that the professor told us frequently was that if you sit on your rights, you will lose them. It would appear to me that the actuarial profession is collectively sitting on its rights and as a result of this, we may be in danger of losing some of them. Our abilities to discriminate in a fair manner are under attack. Sex distinct prices are fair for life insurance, they're fair for annuities, they're fair for car insurance, etc. Sick people, if they are insurable at all, should pay more for insurance than healthy people. They should pay more for life insurance -- they should pay more for disability insurance. Drivers in high risk categories should pay more for car insurance than drivers in low risk categories. There's nothing wrong with this. The insurance industry, as an industry, owes no one an apology for the fact that our product functions most efficiently when we can equitably classify and price potential risks to be insured according to valid statistical data.

I feel that it's vital that actuaries as a whole become more actively involved in the political processes in this country. You can rest assured that the special interest groups which find themselves paying more for various forms of insurance than other people who are relatively healthier or who live longer, will be very active and very vocal in expressing their points of view to our elected officials. Our own viewpoints, and those of the insurance industry which pays our salaries, must be communicated to the legislative branch and to the general public in equally forceful terms.

I know of no better group to communicate or articulate our positions than the actuarial profession. After all, who understands this business better than we do? I can't think of anybody. We owe it to ourselves and our profession and our business to stand up and make our voices heard and our positions understood.

I'd greatly appreciate it if you'd do me one favor. I think you'll be doing yourselves a favor at the same time. I would like for you to write a letter to one of your elected officials -- I don't care if it's at the state level, federal

level or whatever. Please make a brief, general defense of the need for the insurance industry to offer risk classification according to the degree of risk inherent in a particular situation. And please mail the letter.

We cannot afford to be complacent about this. We cannot afford to let somebody else do it. I know that many of you are quite busy. Many of you are up to your backsides in alligators at work. It is fairly easy to make excuses and say, "Other people will write the letters. I don't really need to bother with it. I'm too busy, etc., etc., etc." If we all make excuses, then nothing will get done and we'll all be sitting on our rights. We'll all be a little bit closer to losing them.

Okay, that's enough of a sermon. Now we'll move on to our first panelist. I know this gentleman very well because we work for the same company. James S. Gibbs is a Second Vice President and Manager of the Underwriting Department at Munich American Reassurance Company.

MR. JAMES S. GIBBS: I appreciate the opportunity to address you briefly on underwriting considerations for jumbo policies and in particular, single premium products. As actuaries, you may wonder why underwriting considerations are of interest to you. In an era of decreased profit margins for most life insurance products, actuaries more than ever need to communicate effectively with their underwriters. This is necessary not only to establish accurate mortality assumptions, but perhaps together they can achieve mortality results that are consistent with the pricing objectives. Liberal pricing combined with liberal underwriting can be disastrous for corporate profitability, as we all know.

With this in mind, let's look at jumbo policies and the special underwriting problems they present. In addition, we will look at single premium products, because they are somewhat unique for the underwriter. The definition of a jumbo policy usually varies according to the size of the company. If your retention is $20,000, then a $250,000 policy may look large. On the other hand, if your company has a $10,000,000 retention, then you would probably not have the same concern for a policy of this size. For our purposes, however, we will arbitrarily designate $500,000 and up as jumbo policies.

The same principles of risk selection apply, regardless of amount. The underwriter reviews the application plus requirements obtained (depending on the age and amount applied for), and accepts the risk as is, declines the risk, or asks for additional information.

However, the underwriter may actually find it easier to underwrite these jumbo risks rather than smaller amounts. The larger premium and larger amount at risk justify more medical information and thus, the underwriter may have a better picture of the risk. For smaller amounts, an inspection report or blood studies or medical exam may not be obtained because of the smaller amount of premium available, and thus, the underwriter must often make a decision with less information than he or she would like.

However, the jumbo case is prone to be more speculative than the smaller case and thus presents more of a challenge in terms of financial underwriting. As underwriters we must not be unduly paranoid, but at the same time we must be alert for adverse indications. Speculation can be suspected with the purchase of more insurance than the income or financial status would justify. Or there may be an apparent lack of insurable interest on the part of the beneficiary. Antiselection is not uncommon; this occurs when an individual or an agent inadvertently or intentionally misrepresents the insurability of the applicant, or presents the facts in a manner that makes them more favorable than they really are; for example, deliberately overstating the annual income or net worth of an applicant in order to purchase a larger amount of insurance than is really justified.

The underwriter should look for unusual patterns -- sudden interest in or purchase of large amounts of insurance for no apparent reason, especially if there has been no interest in life insurance in the past. Or the reinsurer may notice concurrent applications from several companies with none admitting that there are applications to other companies. This raises the question as to why a single, large policy was not applied for rather than multiple, smaller policies. One has to suspect an attempt to evade medical requirements such as blood studies, etc., which would be required for a larger amount.

In addition, the underwriter has to be alert for a lack of candor in furnishing medical or financial information; especially recent health changes that are not

fully admitted or documented, as well as an irregular or unusual beneficiary designation. What else have we not been told and have not yet discovered?

Also, the underwriter should look at the source of whatever financial information is available. We can, in many cases, accept "soft" data from sources such as the inspection company or a questionnaire completed by the applicant. However, in other cases, the circumstances may be such that we would require "hard" financial data such as actual financial statements or tax records. Such requests must be made very carefully, since many people would resent what they would perceive to be a violation of their privacy. They can readily understand a bank requiring this type of information for a loan, but do not understand why we must justify financially their large application for insurance.

Financial information can be unaudited statements (essentially just the representation of the applicant with no confirmation by the accountant), accounting reviews, in which the accountant reviews the information but again makes no representation as to its accuracy, or finally, and most costly for the proposed insured to obtain, an audited statement which is fully researched and represented by the accountant as being accurate. The size and complexity of the case dictate the type of financial data required.

For example, a thirty-two-year-old executive has $250,000 of business insurance in force and applies for a $750,000 personal policy. The inspection report shows an annual earned income of $50,000 and a net worth of $300,000 -- $500,000 in assets and $200,000 in liabilities. With no other adverse information, we would accept this as reasonable and require no further financial data.

However, a $10,000,000 application on a forty-five year old executive for key man insurance, required in conjunction with a $20,000,000 business loan, is quite a different matter. We would not only want an inspection report, but as much financial data as we could obtain to show not only the past performance of the business but the future prospects as well. We certainly would not want the $10,000,000 key man policy to be the corporation's major asset!

In addition to the accuracy of the financial data, the underwriter should be alert to any indication of litigation or other business difficulties as well as substance abuse or other potential sources of adverse mortality.

One of the most important questions that an underwriter should ask in dealing with jumbo cases is, "What is the purpose of the insurance? What is to be accomplished?" If it is intended as personal insurance to protect the family, then we usually use multiples of annual income or percentages of net worth, or balance liabilities against assets, to determine the appropriate amount. If it is business insurance -- key man, buy-sell or creditor insurance -- then we must analyze the performance of the business itself to determine the appropriateness of the amount applied for.

Key man, or key person as it is now more appropriately called, is designed to reimburse the business for the loss of essential services provided by key individuals and to defray the cost of replacing that person. Traditionally, this amount is five to ten times the key person's annual income, with the larger amount reserved for more complex industries.

Buy-sell is usually purchased to ease the transfer of business shares to other owners in the event of the untimely demise of one or more of them. There should be a specific buy-sell agreement to specify the amounts involved for each owner, as well as the valuation method used. However, the total amount involved for all owners should not exceed the total net worth of the business plus an additional 10% to 30% for future growth, again depending on the complexity of the industry.

Creditor insurance is usually sold to cover the loans so that the death of the borrower will not adversely affect the creditor. Again, common sense dictates that the insurable interest of the creditor be limited to the amount of the loan. (A little less would be desirable, since presumably there was some collateral in conjunction with the loan.)

What happens if we ignore these practical considerations and issue too much insurance? Adverse mortality. A fact of life for underwriters and actuaries is that we see excess mortality more frequently in conjunction with large policies. Therefore, the underwriter must look carefully for indications of volatile medical impairments, increased accident exposure, substance abuse, multiple avocations or unusual aviation exposure, motor vehicle record violations, financial difficulty, etc.

Also, we have to determine whether the loss potential is such as to make their financial objectives realistic. For example, on a brand new business without an established record of economic performance it may well be that the amount applied for is not justified at this time and is, therefore, mere speculation.

In addition to the mortality concerns in underwriting, the underwriter also has to be aware of persistency. In today's market, we are experiencing substantial turnovers in our business. If an applicant has a history of policy lapsation, then the likelihood is that the new policy will not have better results and the actual pricing of the plan for such short-term duration would be inadequate.

A somewhat unique underwriting challenge is presented by the single premium products. Although the single premium products are not new, the Tax Reform Act of 1986 leaves the single premium products as a unique and major tax sheltered investment. Today, single premium products are not only seen as single premium whole life (SPWL), but also single premium universal life, single premium variable life and other variations. However, the underwriting considerations are similar for all of these.

An article in the *National Underwriter* last October cited a LIMRA survey showing that thirteen companies wrote four times as much SPWL in 1985 as in 1984, and a recent *Best Review* article stated that SPWL accounted for approximately $1.3 billion in sales in 1985. It was estimated that there may be as much as $3 billion in sales for SPWL in 1986, now that tax reform has made SPWL even more attractive. This is due to the unique appeal of SPWL's tax advantages and the zero net cost to the borrower in many policy loan situations. We have even seen recent advertising campaigns featuring SPWL as "perhaps the hottest vehicle on the financial highway." Financial columnists such as Jane Bryant Quinn have been singing its praises as a pure investment, irrespective of the life insurance benefits.

Consider, if you will, the sales potential today for a product that has no sales-load deduction and accumulates cash values on a tax deferred basis. Policy loans are not only tax free, but may be borrowed in some instances with an effective zero net interest charge. In fact, the policyowner can borrow almost all of the cash value, leaving just enough to earn sufficient interest to cover the loan, thereby enabling him or her to avoid tax consequences. In addition, there

are often no mortality charges. The insurance is, in effect, offered as a "free" benefit in order to qualify the plan for tax sheltering status.

Unfortunately, as underwriters we have to resist the optimism of those selling this unique and appealing product and look very closely at the possibility of overinsurance. For all its exciting potential, the SPWL product has one overwhelming disadvantage. It frequently generates amounts of insurance that cannot be justified by the traditional criteria -- the percentages of net worth, personal income or estate values. If we choose to disregard the aspect of overinsurance raised by violation of these traditional guidelines, we could experience larger losses due to excess mortality, as past mortality studies on large amount issues have indicated.

On the other hand, if we fail to realize the growing popularity of these products, we may well be missing out on a very profitable segment of the marketplace. In this respect, Mr. Frederick W. Dawson, Chairman and Chief Executive Officer of Western National Life, said in a recent article in *Best Review*, and I quote, "In years to come when we look back on the 1980s, interest rate sensitive products will be credited with saving the life insurance business. Already, innovative products like SPWL are becoming a vital factor in helping life insurance regain its rightful place in consumer financial strategies." Thus, we obviously cannot afford to overreact or underreact to the overinsurance aspects of SPWL, especially if such products bring in new money rather than merely replacing our own portfolios of traditional products.

After all, we are assured by our sales people that there is little or no antiselection in this product. Those who would obtain insurance for less than honorable purposes would surely purchase annual renewable term at a far smaller cost -- certainly not pay thousands of dollars into a lump sum deposit for an SPWL.

And if the sale has indeed been made purely for investment purposes, with the insurance forced on the applicant by the DEFRA/TEFRA regulations, this does appear to be a valid argument. If we examine the marketing of the product carefully, we see that this is often the case. It is sold as a tax sheltered investment to individuals who view the insurance as only a minor consideration,

i.e., a "throw-in." Nevertheless, even with this product mortality, antiselection is by no means impossible, as we can all surmise.

Another interesting aspect of the SPWL product is it is usually not issued on a substandard basis. Due to the complications of DEFRA/TEFRA, it is very difficult to keep the cash value to premium ratio in compliance with the law for substandard issues. Some policies are structured to use a rate up by age. For example -- a male age 50, rated Table 6 could get a standard policy but pay age 54 rates. However, this method does not work well because of the difficulty of compliance with the cash value to premium ratio; therefore many companies accept up to Table 4, 200% mortality on a standard basis.

Who is the likeliest candidate for a SPWL? The best prospects are said to be the individuals with a lump sum deposit to shelter from taxes -- a widow with insurance funds to invest, a rollover from another tax sheltered source, etc. In most instances the face amounts are not excessive and can be justified in spite of the fact that they are utilizing the funds from these various sources to purchase the SPWL, not for the insurance need but because of its advantages over annuities and municipal bonds (whose proceeds are not tax free as is the death benefit of the SPWL).

However, we should remember the face amounts of insurance generated may well exceed any reasonable amount by our traditional underwriting standards, especially with retired individuals who no longer have a need to protect the loss of future earned income with insurance. A similar problem exists with insurance on juveniles. A frequent use of the product is for gifts to minors (from grandparents, for example) to guarantee educational or other needs will be met. Unfortunately, at the younger ages, very large amounts of insurance can be generated by relatively modest deposits. For example, a $10,000 single premium at age three could generate up to $170,000 initial death benefit. This may not appear to be too unreasonable. Yet if the single premium is $100,000 then the initial death benefit becomes $1.7 million -- far more difficult consideration for the underwriter to justify. As an industry, we really do not have sufficient experience with large amounts on juveniles to predict with reasonable accuracy the mortality to be expected. But common sense tells us that we must proceed with caution in this area.

So how do we actually underwrite this product? First of all, the reinsurer is primarily concerned about the net amount at risk, which is the total insurance face amount less the premium deposited. For example, if the $100,000 of single premium generates a face amount of $1.7 million, then the net amount at risk becomes $1.6 million. If the client retains $100,000, then as a reinsurer, we are considering $1.5 million and would set our requirements accordingly. Of course, the total death benefit must be considered as well in evaluating the overall financial picture.

If we consider that the insurance on this juvenile is excessive, we can suggest that the lump sum deposit not be placed totally on the child but be spread among all family members, especially if they are not already equally insured. After all, if insurance is not the prime objective the applicant should not object to this, as the same total dollar amount is still being sheltered. For example, if assuring the child's education is indeed the primary objective of the SPWL investment, placing it on one or both parents assures fulfillment of this purpose whether the parent lives or dies. Placing it on the child alone could unnecessarily enrich the parents since the child's premature demise eliminates the need for educational funds at the same time it provides them.

For older age risks we see an entirely different problem -- unrealistic enhancement of the estate. For example, a $100,000 deposit at age 65 could yield an initial death benefit of $175,000, or $500,000 could yield up to $900,000 of insurance. Depending on the size and liquidity of the estate of the proposed insured, we may feel that this additional insurance is not only unnecessary but would actually inflate the value of the estate in such a fashion as to hint at antiselection. Is it an appropriate use of insurance to create an estate where none existed, rather than merely protecting an existing one? Here again, it's very important to accurately analyze the overall financial picture.

We have seen an increasing trend towards liberalization of underwriting requirements in recent years, both as a response to rising costs of such requirements and as a response to the pleas from the sales force to expedite the issuance of policies. However, recent increases in mortality have drastically slowed the swing toward liberalization. Indeed, the increased concern over AIDS, substance abuse, etc. has reversed it to a certain extent and we now see many more companies ordering blood tests, commercial inspections, etc. at lower face

amounts than previously. Hopefully this increased concern over protective information will prevent further deterioration of our overall mortality.

However, this liberalized attitude is still prevalent in setting requirements for single premium products. Because of the widespread belief that there is little or no antiselection with these products, many companies have simplified their underwriting requirements, especially at face amounts of $250,000 or less. While we can all agree that we should experience more favorable mortality and better persistency with single premium products, it remains to be seen whether or not such improvements will be sufficient to justify radically altering our medical underwriting assessments.

We must above all resist the temptation to squeeze those risks assessed at greater than 200% mortality into the standard category for the SPWL. In addition, we must remember that if interest rates increase dramatically, our hopes for better persistency could disappear in a flood of rollovers.

As a reinsurer, we typically do not participate in the investment aspects enjoyed by the direct writer. We reinsure and receive a premium for the mortality risk only. In case of a claim, we pay out real dollars just as we do with traditional products. Therefore, we must qualify the risk in many of the traditional ways -- verify the insurable interest, look at the purpose of the insurance as well as the amounts of insurance in force on other family members or business partners, as the case might be. If all of these factors are favorable, we can by and large justify more insurance for a single premium product than we would on the traditional products. However, there must still be a reasonable relationship between the economic loss that will be incurred and the total amount of insurance that is to be put in force.

Another consideration in underwriting investment-oriented products is to establish the source of the investment dollars. Ideally, it should be capital rather than borrowed money, and we should as well like to be reasonably sure that it is part of a balanced investment plan. An individual who is putting a disproportionate amount of investment dollars into SPWL may well be suspect, especially if he or she is not actually to be the insured! We should also consider the distribution system and their familiarity, or lack thereof, with insurance products.

Insurance agents and stockbrokers will not see or sell this product in the same way.

By now, I am sure you all realize that there are no easy answers to the financial underwriting of jumbo policies, especially single premium products. We must allow some traditional leeway for the enhanced investment aspects without overlooking the harsh realities that the possibilities for overinsurance and antiselection do exist; that one can rapidly realize far more than the premium paid in tax free death benefits, and the relatively large amounts involved can have catastrophic consequences for your portfolio if enough excess mortality is experienced.

It is not really so difficult to believe that the medically impaired individual would opt to avoid the traditional underwriting process if he or she can invest a large amount in SPWL to get "easy" underwriting, especially if the money can be "borrowed" back at very favorable interest rates. Therefore I urge you, as actuaries, to work together with your underwriters so that together we can properly address these concerns. It is desirable not only to price single premium products appropriately, but to implement constraints on the amount of premium to be collected at the lower and upper ends of the issue age continuum in order to exercise some control over the potential for overinsurance in these areas.

The appropriate selection of risk is the responsibility of the underwriter. However, profitability will not depend on the excellence of underwriting alone. Rather, it will depend on the coordination of underwriting and actuarial efforts to control excess mortality and to assure that the pricing and profit projections for these products are accurate and applied appropriately.

MR. MOES: Our next panelist is Mark Tullis. He's an FSA with Tillinghast/TPF&C in their Atlanta office. Mark is primarily a consultant in product development. He also has more than a passing interest in the topic of asset/liability management.

MR. MARK A. TULLIS: In product development work as practiced in the 1980s, as never before, it's essential for the underwriter and the actuary to work hand in hand to try to anticipate and reflect in product pricing the type of

underwriting which will be used for each product and to determine the expected mortality, lapse and expense assumptions to be used in pricing. The two topics which I will be discussing, namely reentry term and preferred risk classifications, both illustrate this point vividly.

From a pricing point of view, let's look at some of the general characteristics of reentry term. First of all, most direct writers and reinsurers alike have experienced horrible lapse experience. Many reinsurers and direct writing companies have also reported horrible mortality experience. I suspect most of the other ones don't have enough business in force to do a credible mortality study. And finally, companies developing new reentry term products have had a lot of difficulty getting reinsurance quotes. Many of the companies with existing products have had reinsurers cancel or deliberalize treaties over the past few years.

However, companies do continue to market reentry term products. Furthermore, many reinsurers, will admit that they reinsure a handful of reentry term products which are actually experiencing favorable lapse and mortality experience.

Through the product development process, some of the key items which can be built into the product design to help ensure a successful reentry term product are: marketing, timing of reentry, frequency of reentry, slope of premium increase, company practice at reentry, and alternate reentry designs other than select and ultimate annual renewable term (ART).

First is the company's marketing method. By this, I'm really trying to firm up the old adage that insureds do not antiselect against the company -- agents do. I got a kick out of Jim's comment that the agents take the single premium life products to underwriters and explain how the policyholders wouldn't antiselect because there's no reason for them to antiselect. I'm a gullible actuary but I'm not worried about the policyholders, I'm worried about the agents.

The ideal situation for marketing a reentry product would be either a genuinely captive field force or some type of specialty type field force. Examples of the latter might be fee-for-service financial planning groups or sales through financial institutions. The idea is to keep the product out of the hands of agents who are apt to rewrite the business every year. Probably the worst group to

market reentry, especially a reentry ART product, would be a brokerage field force.

Both the timing and frequency of reentry affect whether or not you'll get a reasonable reinsurance quote on a new reentry term product. Reinsurers frown on what used to be common: one, two or three-year reentry products. Most reinsurers prefer ten-year reentry, and seven years seems to be about the dividing line. Furthermore, there's pressure on companies to avoid more than one reentry opportunity in the life of the policy.

Another design element which is said to influence both mortality and lapse anti-selection is the slope of premium increase. Policies with extremely low going-in premiums, which rapidly increase during the first few years of the policy, generally fare worse than policies with more moderate increases in the early years. With moderate increases, both the insured and the agent are less likely to push for an unofficial reentry or to replace the policy with another insurer's term product.

Another factor which can be expected to affect a company's lapse or mortality experience is the company's practice at potential reentry points. A product may be illustrated and the policyholder may have a right to reenter after the seventh policy year, but not all companies have programs of automatically notifying eligible policyholders about their right to reenter. Of course, whether you have such a program or not can be expected to influence the ultimate cost to the company.

The final item on this list is the possibility of alternate reentry designs other than the most common, which is select and ultimate annual renewable term (ART). A number of companies have experimented with five, seven and ten-year term products with a low initial rate, which then jumps to a higher rate after the initial period of level premiums. Often these companies allow policyholders to then submit evidence of insurability and requalify for the rate which would have been available to a new insured. Of course, this is just a select and ultimate product in a different set of clothes, but early experience seems to indicate that it's better for this type design than ART, because the premiums are level so that there's less reason for replacement or antiselection; at least, not until after the initial premium paying period.

A number of companies have developed products of this type over the past few years and a few have had a bit of success. But in general, I think this design is really like a lot of things in life in that it's one of those things that people like to talk about a lot, but you really don't see a whole lot of action along this line. It seems that for the most part, both agents and policyholders prefer ART and, when they can get it, select an ultimate ART.

Of course, one of the most important items in launching a successful reentry term product is how it will be underwritten. Because of the large potential death benefit relative to the small going-in premium for these products, a sound or even conservative underwriting philosophy is probably more important than with other products in a company's portfolio, such as the obvious example of the single premium life product. It might be noted that some of the companies which still successfully market these products tend to have a fairly conservative underwriting philosophy and seem to have been moving away somewhat from the trend in recent years toward expanded nonmedical limits.

An item which a carrier with such a product will have to address is whether they desire to get into the jumbo policy market. Both because of the lack of reinsurance and because of evidence that jumbo policies tend to be replaced most frequently, there may be a tendency toward declining to issue policies of this type for over some fairly large amount.

A final way in which underwriting can help lead to success of a reentry term product is through persistency underwriting techniques such as trying to determine whether the policy has been replaced a number of times, either through the application or from a Medical Information Bureau (MIB) search, and then actually declining to issue policies which appear to be part of a chronic replacement routine. My impression had always been that persistency underwriting was another one of those things that everybody talks about and nobody does, but I've been a bit surprised to find a number of carriers actually making an attempt to do meaningful persistency underwriting and then actually having the courage to carry through and refuse to issue suspect policies.

Let's look at some examples of successful reentry term products which are currently being marketed. By successful I mean designs which make money for

both the writing company and the reinsurers. These are both pretty extreme examples but they'll give you kind of a flavor.

One example is a no-load product, sold through fee-for-service financial planners. The product pays low commissions by industry standards and the company marketing this product has very low lapse and mortality experience. Their reinsurer, which terminated a large number of reentry term products in 1985, has actually increased the reinsurance allowances for this company within the same timeframe.

A second example is a select and ultimate reentry term product sold by a company through its personal producing general agent (PPGA) field force. This company has experienced very good first year persistency and mortality lower than that which was assumed in pricing the product, and they do have a significant block of it, so the mortality is fairly meaningful. Some of the key items of success for this company include conservative underwriting requirements, with full blood profiles for all cases over a quarter million dollars, and stringent persistency underwriting. The earliest reentry point officially allowed is year seven, and they pretty much refuse to issue policies for over five million dollars, which may not be a lot if your retention's $20,000 but if you have a reasonably large retention it's meaningful not to issue five million dollar policies.

It appears that, to some extent, experience for some of the reentry term products has been as bad as was predicted by some of the doom sayers of the early 1980s. Reinsurers report blocks of business with high renewal lapses and mortality. Despite this, reentry term seems to be the product of choice for a number of agents and consumers, and there appear to be some -- if a limited number -- of companies able to write the product on a successful basis by combining sound product design and equally sound underwriting techniques.

Before I get into my second topic, preferred underwriting classifications, I'd like to point out that both of these products, as well as some of the other products that we're discussing today, will generally fall under the Interim Actuarial Standard Board's (IASB) recommendation on nonguaranteed charges and benefits for life insurance and annuity contracts, which was adopted by the Academy's Board of Governors on December 12 of last year, to be effective in 1987. For those of you who aren't familiar with the IASB, it's a temporary organization

which is currently a subcommittee of the Academy, but which will eventually be replaced by the Actuarial Standards Board (ASB). Its goal is to set up recommendations for professional conduct and practice, and, as a subcommittee, any recommendation it makes has to be ratified by the Academy's board. These recommendations, adopted in December, require an actuary, when he or she gives advice on determining or redetermining nonguaranteed charges, to accompany the advice with an actuarial report.

Examples of such advice would be when the actuary prices an indeterminate premium product, a select and ultimate reentry term product, or a universal life product with preferred risk underwriting. This report, among other things, must list the facts, methods, procedures and assumptions underlying the pricing work. So no matter what assumptions or actuarial techniques underlie development of these products, the actuary now must formalize them and communicate them to his or her management in a written report.

While I think this is something that should have been done all along, it is amazing how many times the actuary of a company will not be able to furnish written summaries of actuarial assumptions used in pricing. So, there is now a recommendation that for products with nonguaranteed charges, you're supposed to provide a written report to your management outlining the actuarial assumptions that went into your pricing.

Whereas reentry term is a product whose day is to some degree past -- it's really a product of the late 1970s and early 1980s -- my second topic, namely preferred underwriting classifications, is a topic of the future which is gaining in momentum with each passing year.

Looking at the typical risk classification used before 1970, most policyholders received a standard rating class and the remainder received rated policies. Then, in 1964, someone at State Mutual put two facts together -- namely that nonsmokers have lower mortality than smokers and that there's a lot more nonsmokers than there are smokers. The result is that if you give a discount for nonsmoking, most people end up qualifying for the discount and your product ends up being competitive for most of your potential policyholders.

This led to the typical risk classification of 1980, where standard policyholders receive either a nonsmoker or a smoker policy and policyholders with impairments receive a rated policy. In the late 1970s and early 1980s, a number of companies hit upon the idea that subdivision is not such a bad idea and we then began to see the development of preferred rate classifications, first for nonsmokers and then, within the past few years, for smokers.

The trend toward this subdivision has been accelerating and I would predict that by 1990 the subdivision into the four standard rate classifications -- preferred nonsmoker, standard nonsmoker, preferred smoker, and standard smoker will be just as common as the smoker/nonsmoker division is today.

In the past, carriers with this sort of subdivision have tended to be either brokerage companies, where price competitiveness is of paramount importance and subdivision is a way of achieving price competitiveness for preferred subgroups, or else nontraditional marketing companies. Companies in the first group would include First Colony Life of Virginia, the ICH companies, Kemper -- all of which have had products like this for a while. Companies in the latter group might include Massachusetts Indemnity and Life Insurance Company which markets its policies through the A.L. Williams Agency. However, in the past few years there's been a steady shift toward mainline companies adopting these subdivided classes. For example, my understanding is that the Metropolitan's 1987 rate book includes preferred and standard, smoker and nonsmoker classifications.

Given this trend toward preferred and standard classes for both smokers and nonsmokers, what is yet to come? One could ask whether we will not end up with a preferred Table P classification, and it could work like this. Let's say you've got a 50-year-old diabetic using insulin, with albumin in the urine and the onset of retinopathy -- your typical Table P. He could qualify for the preferred Table P if he had not been skydiving in the past six months.

As with reentry term, the development of products with preferred rate classifications demands cooperation between the actuary and the underwriter. What are some of the considerations in development of such a product?

Typically, either the actuary or the marketing department will estimate the percent desired to qualify for the preferred classification. It might be

surprising to some of you that this estimation usually takes place before the underwriter gets into the act. But actually, it's a marketing decision whether the preferred class is to be a true preferred class, only available to a small percentage of prospective policyholders, or whether it's desired that most applicants will qualify. It would seem that most of the policies in the marketplace, particularly the brokerage products, are designed so that a majority of nonsmokers qualify for the preferred classification. However, there are a number of companies which have taken the opposite approach. It might be noted that one of the early entrants into this market, Occidental of North Carolina, abandoned its preferred rate classification several years ago. Occidental had designed its preferred classification, called the Aerobic Class, so that only extremely active, athletic individuals would qualify. Their requirements were so restrictive that few people qualified and the agents ended up ignoring the discount.

Once the company comes to grips with what percentage of potential insureds should qualify for the preferred classification, the actuary needs to sit down with the underwriter and develop criteria which will determine who qualifies and who doesn't. Looking at the company in a vacuum, it's not necessary that proper selection criteria be developed as long as the anticipated percentage of qualifying insureds is attained so that in total the mortality works out to be the right ratio. For example, you could base selection on the social security number of the insured or when his grandmother was born. However, companies don't operate in vacuums. Reasonable selection criteria must be developed so that the standard preferred are not unfairly encouraged to purchase insurance from other companies, leaving your company with an unusually high percentage of preferred policyholders who were selected on some inappropriate basis. Later we'll look at some of the criteria used to develop preferred risks.

Hand in hand with the first step, the actuary must develop mortality assumptions to be used in product pricing. This would, of course, be based on the company's usual aggregate mortality assumption which varies from company to company, and would be, to the extent possible, based on the company's actual anticipated or historical mortality experience. Assumptions are then set for the preferred and standard rate classifications in such a way that the average mortality, based on the anticipated percent qualifying, would approximately equal the standard aggregate mortality assumption for that company. Generally the

preferred assumption is developed first and then the standard assumption is used as a balancing item. The preferred discount off of standard mortality will vary from company to company and will be a function of, for one thing, how stringent the qualifying rules are for that particular company. But discounts in the 5-7% range are not uncommon.

Once the percentage qualifying, the underwriting criteria, and the mortality assumptions have all been developed and the product hits the streets, it's important to monitor results. It's not inherently bad to achieve a larger percentage of the preferred or standard classification than originally anticipated, especially if you're dumping most of the risk on your reinsurer, but most companies will probably find it necessary to fine tune their selection criteria and/or their product design a bit after the product leaves the ivory tower and enters the competitive world of life insurance marketing.

To see why it's important to monitor results for this type product, let's look at a company which develops the product, comes up with underwriting criteria and then doesn't monitor results. Because the company is blind to its experience, it could be facing a potential disaster and not be aware of what's happening. Of course, some of you skeptics out there may prefer this situation to what actually happens when the results are monitored, namely that the company becomes aware of the disaster that's about to befall it but it's powerless to stop the disaster.

Since preferred risk underwriting is a fairly new item, and since companies have different philosophies regarding this risk classification, it's not surprising that vastly different approaches have been taken when developing criteria for the preferred risk selection.

A number of items have been considered when assigning preferred risk classifications. Some companies require blood profile results with favorable cholesterol or a favorable cholesterol to high density lipoprotein (HDL) ratio. Frequently, favorable immediate family history -- free of cardiac or renal or diabetic disease, or disorders prior to age 60 -- may be imposed. Blood pressure requirements may be more stringent than required to achieve standard rating, and the same goes for resting heart rate. For smokers to achieve a preferred smoking classification, it's not unusual that the company require that one pack or less be smoked a day or that smoking history be limited to the past few years.

Although often suspect, companies may require statements regarding type or frequency of exercise programs. Regardless of necessary qualifications, companies frequently have a hit list of impairments. Regardless of other qualifications, if the applicant has one of the impairments on the hit list he's not eligible for the preferred underwriting classification. Finally, individual companies may use a number of other criteria. Evidence of regular medical checkups and good driving records are frequently required. Questions such as "Have you owned a motorcycle during the past twelve months?" and "Do you have plans for cosmetic or elective surgery during the next twelve months?" are actual questions I have seen on applications.

Although every company may require slightly different information and use it in different ways, there are basically three approaches to determining risk classification once all this information is gathered. If a company wishes to severely restrict the percentage of people qualifying for the preferred risk classification, it may have a number of questions regarding information it considers to be important, and then require that favorable responses be given to all those questions in order to qualify. With a second, more popular method, a company assigns net credits and net debits based on answers to these questions, and then requires a certain score in order to qualify for the classification. For example, one company would generally prohibit smokers of two packs or more a day from qualifying for the preferred smoker classification. However, if the applicant has a favorable, recent stress electrocardiogram (EKG) or alternatively has favorable family history for cardiovascular disease, and favorable HDL cholesterol reading, and verifiable evidence of a strenuous physical exercise program, then these positive factors will outweigh the poor smoking history.

Using a third method, a company does more or less its normal underwriting and just splits hairs a little finer. That is, it may issue a standard qualification to those people who would normally qualify for a AA rating or maybe even an A rating. This method may be especially used by companies which have not historically used AA or A rating classifications, but rather have rated all these individuals as standard.

Although the jury is out on the most successful criteria for such a product, I believe the market dictates that for a discount to be effective most people must qualify for it. An applicant who fancies himself as being a macho physical

fitness addict and runs in marathons will not take kindly to losing the preferred rating due to some blood test that only doctors and underwriters have heard of.

Although some tests, such as for cholesterol, might be useful in selection criteria, I believe it should be reasonably possible for a fairly healthy, well conditioned, potential insured who answers the application honestly to figure with a fair degree of success whether he will qualify for the discount.

This opinion can be summarized in the following equation for failure which states that if you design a product with a small group of potential eligible lives, and if you use difficult-to-determine criteria, the end result is bound to be agent dissatisfaction. In the competitive life insurance arena, agent dissatisfaction translates into poor marketing results and, therefore, poor profitability, which leads to the ultimate disaster of the company -- hiring a new product actuary.

Contrasted with reentry term, which is largely a product whose time is past, preferred risk classification is an idea for the 1990s. The typical product in the future will be designed with four classifications, in such a way that many, if not the majority of the potential insureds, will be able to qualify for the preferred classification, and with risk criteria so that most applicants will have a fair idea of how they will rate. Although I doubt we'll end up with my example of a Table P preferred class, I would not be surprised to see innovative companies developing additional risk classifications where future studies point toward legitimate risk factors.

As long as our business remains one of selection, I believe that the company which does the best job of selection will also be the company which is able to offer the most competitive products on a soundly priced basis.

Our final panelist is Mr. Howell Martyn from Mutual Benefit Life in Newark, New Jersey. He will talk about simplified issue underwriting and also underwriting for alcohol and substance abuse. The latter area is one to which he has devoted many years of extensive personal research.

MR. HOWELL C. MARTYN: I also have two separate topics and they appear to be quite different -- simplified underwriting methods and substance abuse underwriting. You may think when I'm all through they don't have much to do with

each other, but I think they do because they emphasize the fact that whatever you do in underwriting ought to respond to pricing assumptions made in the first place, which seems sort of self-evident. Or possibly vice versa, that pricing assumptions ought to fit the underwriting that you already have or that you're stuck with.

In a general way, I will try to make the point that marketing, pricing and underwriting strategies ought to be developed simultaneously by the same group of people, and not the way it often happens (if it happens in your company the way it happens in mine), which is to introduce a new product, jerry-build it to fit some marketplace, and then turn it over to underwriting for production. This is a classic example of what's normally called fire, aim, ready -- or ready or not, here we come.

First let's fire at simplified underwriting. Probably the most obvious example of simplified underwriting is plain, old-fashioned, traditional, nonmedical underwriting. We take it for granted nowadays, but it came into being at least partly in response to a sales need for simpler, easier ways to sell smaller policies.

I think our challenge, respectively and jointly, is to capitalize on that kind of thinking, to find new ways to make the underwriting process part of the sale rather than part of the problem, which is often the home office posture. The real purpose of simplified underwriting techniques is to facilitate sales that probably could not have been made otherwise, using traditional underwriting methods.

I'm sure you already know how differently agents and underwriters look at the process of converting a prospect or an application into a sale. Agents want guaranteed-standard on products that have no mortality margins at all, without any silly questions about insurability -- instant approval, instant issue, and 100% first-year commissions. Meanwhile underwriters wish-ten year endowment policies would come back -- they want exams and blood chemistries on everybody over age 10, and generally think that group commissions are good enough for anybody. It's a wonder we get anything done.

So let's look at some ways that marketing, pricing and selection strategies can be developed simultaneously. The first example was plain, old-fashioned,

vanilla, nonmedical underwriting. There's a relatively recent (ten years maybe) enhancement of nonmedical underwriting, which is simply to increase your nonmedical limits for clients who have had a recent physical examination by their own physician. I think most insurance companies would recognize that a good, complete physical exam done by a personal physician is at least as good as an insurance physical and typically better.

Some companies will recognize that fact formally in their nonmedical schedules; my company, Mutual Benefit, is probably a typical example. We will double nonmedical limits (and we have some fairly aggressive limits normally), if there is available to the underwriter a good attending physician statement (APS) available. In certain situations where there is a quite recent checkup from a well-known clinic, I'll go further than that. I think that's good underwriting. I think that makes good sense and it's very easy for the underwriter because it doesn't require any coordinated effort with the pricing actuary. But it really isn't a marketing strategy by itself because it facilitates sales (at least I hope it does), but it doesn't create them.

You can take that example one step further. You can require an APS as a condition of insurability. Since most highly compensated employees have annual physicals as a matter of course, it's pretty easy to incorporate that condition into an underwriting marketing package for highly compensated employees, which is a typical market. When you have a good APS, on virtually 100% of the applicants in a group, you really don't need much more underwriting than the very bare minimum -- maybe an actively-at-work question, maybe a nonmed if you're chicken-hearted, but not much more than that.

Or, you can go in the opposite direction. You can skip the APS completely, underwrite (and I use the term loosely) on actively-at-work and not much else. Actually, in the industry we've been selling individual policies like that for a long, long time on tax-qualified plans, pensions typically. But that quickly expanded into any group with mandatory participation, or close to it, and benefits weren't subject to individual control. We typically pay full commissions on those cases. But do we use our top drawer products? Not usually, and we shouldn't. If you don't know why already, I'll get into it later.

Another very popular kind of simplified underwriting and marketing plan is the so-called thrift plan or payroll deduction plan, where participation is voluntary but there is a common employer who sponsors the plan and offers his payroll system as a premium collection vehicle. Participation rates of 50% or even higher are attainable, but they can be lower, sometimes a great deal lower, which calls for some caution. For the payroll deduction kind of case, streamlined applications and streamlined underwriting are a practical necessity rather than a nicety. Agents can't spend a lot of time interviewing large numbers of people in order to process these cases. The mortality costs ought to be higher. Mortality costs typically charged are those approximating those used in pension plans, and I think that's appropriate.

But again, it's important that you aim before you shoot. Get your underwriter's participation in your mortality objectives and in your application design. If they're any good, they have a good deal of knowledge about marketplace pragmatics. If they're not any good, then you shouldn't be in simplified underwriting, which I think is called Catch 23.

Payroll deduction cases are a good example of marketing/underwriting synergy because who you deal with in the field makes a difference. Some agents have very sophisticated staffs (enrollers) and can develop higher rates of participation and persistency than those who don't have those kind of cadres. Make up your mind which is your target, because depending on what your target is, your mortality and your persistency assumptions may not be the same. Typically what you'll do is what most companies do -- try and target both groups, and now you've got a problem.

There are other arrangements with even more optional participation, and they range all the way from insurance funded contributions for college or church to pure association cases, where the only common thread is the sponsorship of the association. Participation rates of 25% or more are frequently claimed for these groups, but my experience tends to parallel Brother Matthew's who observed that "many are called but few are chosen." Sometimes you're lucky to get 2 or 3% and persistency is problematic. For these markets, you must have specially priced products and/or (probably and) different commission scales and some underwriting restrictions. Guaranteed-standard doesn't make sense in these cases, although I'm afraid that it's being done in the industry. If it's being

done on a profitable basis to the insurance industry, then I doubt that it's a good deal for the customer and I think in the long run that does us all a disservice.

Another category that you're all familiar with is the exchange, 1035 or otherwise. Many companies have experimented with methods, and have streamlined underwriting arrangements, basically designed to facilitate the capture of competitors' policies. Ignoring questions of ethics, there is potential for anti-selection. You shouldn't rely only on the originating company's underwriting. Their underwriting philosophy and objectives may be quite different from yours. In fact, they may be a whole lot different. Here again, it's being done in the marketplace. I'm not a fan of it, but if your pricing assumptions and objectives are in sync with the kind of underwriting you're doing, maybe it'll work for you.

The last level, some might call it the depths of underwriting, is what I call guaranteed-standard. Here you rely on especially favorable characteristics and you guarantee the price. Individual underwriting, as we commonly know it, is virtually nil. It looks like group, but we're providing individual policies. For obvious reasons, this can be a very effective marketing tool in the right situation, but you have to go into them with your eyes open. Why? Let me give a few statistics from my own company's experience.

Our mortality experience on guaranteed-to-issue and simplified underwriting plans is virtually the same whether it's tax-qualified or nonqualified. The select mortality exposures of 1980 to 1985 are 113% of expected, according to the 1965-70 Select and Ultimate Basic Table. For the same durations, select paramedical mortality was 54% (interestingly enough, 62% for medical -- we get better results from paramedical). You can roughly say that simplified or guaranteed-to-issue mortality runs roughly twice the rate of fully underwritten mortality.

If your product is priced for that, then you should be in good shape. If it isn't, you need to get it back somewhere. I don't have any trouble getting at least some of it back out of your agents' commissions, although they frequently will resist that principle. I don't have any trouble if you're genuinely providing two things when you do it; if you're helping your agents make a sale that they

probably couldn't accomplish otherwise, and you make the transaction genuinely easier and more cost effective for your agents.

Let's look at a case to illustrate a lot of the foregoing points. It's based on an actual situation and it is typical of a lot of business that's being underwritten today. A Fortune 500 type company wanted to insure their top officers for deferred compensation at a level of two times salary. The weighted average age was 51. The median risk amount was $300,000. The maximum was $1.6 million on the chairman of the board, who was age 48. There were 129 lives under age 65 and 4 over age 65.

Would anyone not want that case? The annual premium was a little less than a million dollars. Would anybody do that case nonmedically, with an APS from the last executive health physical, on a guarantee-to-issue basis? I sure would. I'd use our best product, I'd pay full first-year commissions, and if they wanted me to, I'd send an underwriter out at my expense to do the nonmedicals!

Would anybody underwrite it on a guarantee-to-issue basis without an APS? I'd do that too, but I wouldn't do it with full first-year commissions or our top of the line, fully competitive policy. I would insist on some evidence or full evidence on those over age 65, and certainly on the $1.6 million chairman, who is likely to be the decision maker.

Would anybody underwrite it (or nonunderwrite it) on a guaranteed-standard basis? I'd do that, too, a little reluctantly I must admit, but I think you could package an offer that included a product designed for quasi-group mortality, reduced commissions, and some ceiling on the risks that you're underwriting or not underwriting. I might arrange to share some of the risks across the board with the reinsurer, and if I did that I might also consider passing back some of the reinsurance cost to the customer as a fee-for-service, which is exactly what it is.

If it's done correctly, I think the last package can produce satisfactory results. But, and it's a very big but, it's not really the most attractive package for the customer, or for the agent. And I would always argue strongly for some package that involved minimal underwriting, with at least an APS. Realistically, that isn't hard to do and it'll produce a much better result for the people involved.

On the other hand, don't rule out the fact that there may be perfectly legitimate reasons for a genuine guaranteed-standard approach. A typical situation might involve a multinational organization with offices all over the country, even overseas, and coordinating underwriting requirements may be difficult. Or you may be replacing pure group insurance and the management of the corporation insists on a no-fuss, no-muss approach and you either have guaranteed-standard or you have nothing. This type of situation can support the above approach if you package it very carefully and know what you're dealing with.

These are all examples of different underwriting approaches that one way or another facilitate sales. I think the trend is very strong towards finding creative ways to group lives to improve their marketability. But we have to be very careful in this area with our terminology and in closing this subject, I'd like to make a pitch for a standardized vocabulary that will help us to mutually define our objectives when we tailor underwriting offers.

Guaranteed-to-issue means what it says -- that the insurer does not refuse anybody who is properly eligible -- but the price is not guaranteed. Some evidence of insurability is required and the right to get additional evidence is frequently reserved, although obviously the spirit of the arrangement is such that you don't abuse that.

In practice, these cases often involve commitments to absorb small rates, which your agents will call nuisance rates, typically up to Table B, occasionally higher to Table D. And again that's fine as long as that's what you've contemplated, and you've priced for it and you've communicated that precisely.

Interestingly enough, guaranteed-to-issue will occasionally, by definition, require you to issue insurance to someone who is uninsurable. My approach has been to simply ask the medical director to "guesstimate" to the best of his or her ability what he thinks the life expectancy will be. And if he says, "I don't know, but maybe four years," then you issue the policy with a standard premium and you add an extra premium of two hundred or two hundred and fifty dollars. That's a lot of money. Sometimes, the buyer will withdraw that life and say that they will fund their obligation some other way. That's fine. Sometimes they accept the offer and then you hold your breath. You have to be

prepared for those situations when you get into guaranteed-to-issue arrangements.

Guaranteed-to-issue sounds like guaranteed-issue, which is frequently understood in the field to mean what I call guaranteed standard. If you issue a guaranteed-standard plan you don't need traditional evidence of insurability. To issue individual policies guaranteed-standard is not necessarily an evil if you structure the package right -- the underwriting, the compensation, the product, the price. But it sure is an evil if you meant guaranteed-to-issue!

People, especially agents, hear what they want to hear. I can tell you of bitter arguments that go like, "You told me it was guaranteed and I've committed the company, so you've got to do it." So I would propose the following: guaranteed-to-issue means no declines of eligible lives but substandard rates may be charged when necessary or as defined. Guaranteed-standard means no underwriting other than to establish eligibility. The price is fixed according to age, sex and smoker/nonsmoker (the last two are negotiable).

The difference in terminology is not idle. Disregarding current arguments with your agent, when you use the word *guaranteed* it's likely to lead to much more difficult arguments in the future when claims come up. Litigation may be involved, and you know what guaranteed will mean to a jury. So whatever you do, be sure that whatever you've offered is well defined, well understood, and specifically confirmed in writing. That's very important.

Notwithstanding all those caveats, I really believe that innovative packaging of offers of the kinds that I've described and others are indeed important ways to capture an important market. Individual underwriting for big groups of lives is expensive; I don't think it's necessary and it isn't competitive.

The second subject is underwriting alcohol and drug abuse. In life insurance underwriting the two biggest factors that underwriters still deal with are cardiovascular disease and cancer (I don't expect that to change for some time) and woe to the underwriter who ever forgets that. We know how to underwrite cardiovascular disease and cancer pretty well now and, in fact, the problem is that innovations in the technology concerning these two diseases come at us so

fast that it's difficult to assimilate them into any kind of a meaningful underwriting program.

But there are some mortality factors where we don't, frankly, underwrite as well as we might. They come under the general umbrella of substance abuse. We tend, as an industry, to be squeamish and a little defensive about underwriting substance abuse. There are a lot of substances around to abuse, but I'm going to zero in on what I think are the three most important.

What would you estimate is the number one substance abused today in our culture? It's not alcohol, and it's not pot, and it's not crack. It's plain, old-fashioned nicotine. And I guess I would say from the underwriting prospective that a classic example of the fire, aim, ready approach to marketing was the massive industry switch to nonsmoker discounts about twenty years ago. Not that it wasn't a good idea, and we've sold huge amounts of insurance on that basis -- I hope and believe profitably.

Little thought was given then to the underwriting control of the primary underwriting criteria involved, which was cigarette smoking typically within the last twelve months. We all know what happened. Virtually every company who went into it had a sudden increase in the ratio of alleged nonsmoker applicants. Population smoker/nonsmoker ratios ranged from 40-60 to 30-70, and when we went to nonsmoker products all of a sudden we had insured ratios of as low as 20-80 and occasionally even 10-90.

When the tobacco dust had settled, there was only one real major cause for the changing ratios. We had made the economics of being a nonsmoker too attractive. Misrepresentation was virtually irresistible. Underwriting control was subjective and difficult. One of the things that we can do today to help to restore some real underwriting control would be to change the primary underwriting criterion from noncigarette use to nontobacco use.

I will concede readily that the Surgeon General's reports give faint justification for doing that. The mortality rates for cigar and pipe smokers and chewers are lower than they are for cigarette smokers. They're higher than standard, but they're a lot lower than for cigarette smokers. I think it's a fair inference that

as cigarette smoking does decline, the mortality from other tobacco use will increase relatively.

The immediate advantage of underwriting tobacco versus cigarette use is that it's much easier for underwriting control, through the urinalysis test for nicotine. That's a good test, it's very reliable, highly specific -- it yields few, if any, false positives and it's dirt cheap. Most of the major labs charge fifty cents for it.

The value of underwriting tobacco versus cigarette use is that it eliminates arguments over the source of nicotine in the urine. Today your underwriters will frequently be told, if they try and challenge a situation where they believe there's cigarette smoking, that the applicant was an occasional pipe or cigar smoker. We have virtually no way of confirming that or rebutting it, but most underwriters will share the general feeling that we're often being had.

My lab reported to me last week that 27% of all of the urinalysis they do are positive for nicotine. Of that number, 49% showed moderate to heavy concentrations. Do you believe that 49% of 27%, which is 13% of applicants smoke cigars, pipes or use snuff? That is one out of eight. While I have no data, my general observation of the ambulatory public suggests to me where that 13% is coming from. We can avoid both suspicions and arguments by adopting non-tobacco criterion.

That even gives you the opportunity to go one more step. If you're confronted with a statistical finding of significant nicotine in an applicant's urine, you don't have to charge smoker rates, or you don't have to charge tobacco rates if you want to differentiate between the two. You have another option -- you can charge an extra premium for it. Today you charge an extra premium for too much sugar, albumin, or cholesterol in the blood. Now what is the difference? As a minimum, it focuses on the fact that you've got a poison in the system, instead of endless, fruitless arguments about where it came from.

Home gardeners may know that a 1% nicotinic acid spray is a very effective household remedy for many garden pests. That ought to tell you something about nicotine.

Even though our ability to police nonsmoking misrepresentation today isn't as sharp as we would like it doesn't mean that there aren't misrepresentations -- quite to the contrary. Would anybody disagree that smoking is material to the risk? If you can test other material misrepresentations that occur within the contestable period, why would you treat this one differently?

Some have argued that any effort to contest such a case would flounder on the fact that you would still have issued a policy. Isn't that also true of the person who is overweight, hypertensive, asthmatic, diabetic or whatever? You still issue them a policy, only at a higher price. Isn't that what we do to smokers? I don't see any difference at all except in the terminology. I think that we do ourselves and our industry a disservice by being so defensive about it.

I would recommend that you quote or paraphrase Gertrude Stein, "misrepresentation is a misrepresentation is a misrepresentation." Tell them that you intend to treat nonsmoking misrepresentations as any other; with policy recision, if it's discovered within the lifetime of the insured, or denial of death benefits if it occurs after the death of the insured within the contestable period.

We've successfully rescinded cases within the contestable period during the lifetime based on those misrepresentations. We are basing a current case on Continental Insurance Company's text called *risk selection*. It's hopelessly out of date. I think most of the data in it dates back to the 1920s and the 1930s, but I don't think that there is a textbook written on underwriting yet that's as good as that one in terms of the principles that it describes and, furthermore, it's written with a great sense of humor.

In its chapter on alcohol abuse it starts off with a little poem which I'd like to read.

> "If on my theme I rightly think, there are five reasons why I drink.
> Good wine, a friend, because I'm dry, or lest I should be by and by,
> and any other reason why."

I think that alcohol abuse is probably the most under-underwritten condition today. The number of overt alcoholics in the United States has been estimated from ten to fifteen million people or higher. A lot of those people are in our

primary insurance markets. There are two simple things that we can collectively do to improve the identification of risks with higher disposition to alcoholism.

The first and most important is simply to develop an alcohol profile for your underwriters. List what groups or symptoms suggest alcohol abuse. There are all sorts of variables -- you don't have to be a genius to figure out what they are -- accident records (motor vehicle and otherwise), disorders of the nervous system, gastric disorders and other substance abuse (typically nicotine). There are lots of euphemisms that attending doctors use when describing the drinking habits of their clients. Your medical directors can help your underwriters understand what those are, and they can help in putting together a checklist of alerts or clues. When you have a list, conduct lots of case clinics with your underwriters; talk about it. Your old timers are already savvy. They know about this. Younger underwriters will have their eyes opened. They are often underwriting smaller amounts of insurance where some of these minor histories will be appearing.

A simple example is a smoking applicant who has recently changed jobs -- nothing wrong with that. He admits to two minor traffic violations in the past three years -- no DWI, nothing fancy. He had a history of gastritis, which he treated with Tums. This guy is a suspect for alcohol abuse. Statistically, he is at high risk. The problem is that underwriters aren't used to dealing with individually insignificant factors like these. The combination is critical. Something must be done with a case like this. It doesn't mean you turn it down, it doesn't mean you rate it, but you can't say, "Oh those little things don't mean anything, on to the next one." That's dynamite. I would make the same point in reference to AIDS because the same principle is the best defense.

Number two, be certain that your blood chemistry profile always includes at least the GGT -- the gamma glutimal transpeptodase. As far as I know, all of the major labs that cater to the insurance industry automatically include the GGT in their profiles. Don't accept substitutes.

Here's another pitch for an item in vocabulary -- we talk about blood chemistry profiles and sequential multiple analysis (SMA) 12s as synonymous. Let's get the term SMA 12 out of our vocabulary. An SMA 12 has twelve items and

practically never is the GGT one of them. And it also omits some other things that tend to be very important to underwriters. So ask for a blood chemistry profile. Don't ask for an SMA 12 because that's probably what you'll get and it isn't what you need.

My good friend at Lincoln National, Hank George, reported last year at the Society meeting in Boston that the cost benefit of the blood chemistry profile in itself exceeded 7 1/2 to 1, and over half of that came from the GGT. Hank's calculations were based on a cost of $40 for the blood chemistry profile. Today, even if you include an AIDS antibody test and often a cocaine test, you can get it for less than that, around $30, and the cost benefit will clearly be higher and that may bring the break-even point down to as little as $5,000 of face amount.

That's obviously an impractical level in the real world, but if your out-of-pocket cost is less than $40 and you're getting blood chemistry profiles anyway, be sure your underwriters understand the significance of the GGT component. The GGT may be elevated for reasons other than sustained alcohol abuse, and it is not elevated for a single binge episode, which is what your agents will often claim. You can't elevate your GGT without going at it for a long period of time and if you stop, it'll stay high for a long period -- for weeks or months. It's a good test for alcohol abuse. There are other things that will elevate it; the vast majority of them are very important underwriting concerns like pancreatitis, uncontrolled diabetes, multiple sclerosis, certain carcinomas, myocardial infarctions -- equally important concerns so you don't need to be hung up on the fact that we typically use it to identify the probable alcohol abuser.

Look up two things if you're not already familiar with them. The *Record* of 1985, Vol. 11, No. 2, covered a presentation made by Hank George, Dr. Gary Graham of Kemper, and Roger Betts in New Orleans. It's an excellent presentation. It will give you hard data on testing protocol, specificity and cost benefit. Another valuable reference is the *Home Office Life Underwriters Association Proceedings* Number 67, 1986, which includes an excellent panel presentation on alcohol, drugs, and driving habits, which are clearly related topics. If you don't want to read them, be certain that your underwriters do and are familiar with them.

Last month the lab that I use analyzed their GGT requests and found that 13% of them fell outside of what is the normally accepted maximum range. There was a consistent upward trend with age -- 5% were abnormal under age 30, and 18% were abnormal over age 50. More importantly, 5% of all applicants tested had levels at twice the normal level, which is a lot, and 2 1/2% had levels at three times normal. I don't know of any companies, unless some of the reinsurers do, who will insure somebody who has no finding other than a three times elevated GGT. I don't know what causes that, although I have my suspicions and I won't offer insurance. The cost benefit of identifying that 2 1/2% alone should be good.

My last subject is cocaine use. Cocaine is hardly the only drug abused nowadays, but it seems to have largely replaced all of the street drugs that we used to be familiar with, particularly the amphetamines. And as you know it's the one that's getting all the press nowadays. You can test successfully and accurately for many drugs if you want to pay the price, and it can get pretty expensive. But I want to zero in on cocaine because it's the drug of choice in our prime and target markets as opposed to heroin. I'm going to focus on only two aspects of underwriting cocaine use.

The first aspect is that, you'll find evidence of cocaine use almost universally by a urinalysis. There are very few people who admit using it. There is not much that you can do about it other than to decline the risk. For recreational users, that's probably underwriting overkill -- no pun intended. But I know of no way yet to separate meaningfully the casual social user from the abuser or the addict. You may remember that we all went through the same kind of agonies twenty years ago when marijuana use became prevalent. There's an important difference with cocaine. Pot is only mildly addictive, if it's addictive at all. Cocaine is highly addictive, and its derivative, crack, is even more so.

In a few years, if we're lucky, there will be some methodologies derived or enough data will come out that we can make some kind of reasonable differentiation between users and abusers as we do for alcohol. But for the present, I don't know any way of doing that. I believe the industry is refusing all of these risks. If this is the case, I don't want my company to be known, particularly in the brokerage community, as the only one that writes coke heads.

Second, what does it mean when you get a urinalysis that has a positive cocaine test? It means one thing for sure -- somehow your applicant has gotten cocaine into his or her body. You don't need to argue about how. Despite widespread media reports, false positives are virtually nonexistent if the the enzyme amino acid test is used by the lab. The two major labs that cater to the insurance industry do use this test.

If and when you decline an application because of a positive cocaine test, you are going to get intense and persistent denial from both the agent and the applicant. You may be threatened with litigation. My advice to you is to stand fast. You probably won't be sued. Whatever you do, don't agree to accept repeat urinalysis later on. One of the few shortcomings of the urinalysis test for cocaine metabolites is that they dissipate quickly, typically within about 48 hours. Except in the case of the true addict, who probably isn't an insurance applicant anyhow, an applicant can wait 48 hours and then submit clean urine.

You should stand fast in your underwriting decision because the cost benefit is very strongly in your favor. Last summer in July and August, we tested 1000 and out of that 1000, we had ten positive cocaines, for a rate of a little over 1%. My labs reported to me at that time that their average industry result was a little over 1 1/2% so we felt we were in the ball park. The average age on those ten cases was 33, and the average face amount was $500,000 which is about five times our average new policy. Since the beginning of this year, we've had six additional positive cocaines, the average face amount on those six has been almost one million dollars. The test is cheap in comparison. It costs, depending on the volume you get, between $4.25 and $4.50.

Using those numbers and with the help of an actuary, we deduced that you will break even in ten years by testing for cocaine at face amounts of $12,000 if you think that a positive cocaine test gives a mortality result of 500%, and at $6,000 face amounts if you think that the mortality result is 1000% (which is what the industry believes today).

Few companies today get a routine urinalysis for amounts as low as $100,000 and there are quite a few that will go as high as $500,000 and even more before they get a routine Home Office Specimen (HOS). So I think there's an obvious lesson that the old-fashioned HOS, which ten or fifteen years ago fell into disuse, is

now greatly undervalued. I would say that combined with the value of testing for nicotine, the hardest part of underwriting by urinalysis would be finding the face amount level to set that you can sell to your field force.

The bottom line of all of these approaches for underwriting for drugs is that identifying them is no longer a laboratory curiosity. The results, particularly presumed nicotine, alcohol and cocaine use, applies unfortunately to a significant proportion of our applicants and the mortality implications are very substantial.

A generation ago, the test of choice in underwriting was generally the electrocardiogram. Today we find sophisticated analysis of blood and urine will return to you much higher cost benefit ratios. They are less expensive than EKGs and X-Rays, and they're generally familiar to all your applicants. But be certain that the test protocol that you do adapt includes the right things. Excluding AIDS, which is a different subject, the big three are nicotine, cocaine and GGT. I don't care what kind of dividends your company pays, stockholder or otherwise, good underwriting along those lines will greatly improve those dividends.

MS. PATRICIA L. GUINN: I have a question for our two underwriters. Mr. Gibbs brought up the topic of single premium insurance and in particular, for single premium insurance marketed through stock brokers, there is a major problem for companies responding to the desires of that distribution outlet to turn around applications quickly. They're used to making trades that happen instantaneously and not used to selling a policy that takes on the average, three or four weeks to process. What, in your opinions, are areas that companies can look at to streamline their underwriting procedures in order to issue single premium policies more quickly and similarly, on the other hand, what are the areas that companies shouldn't sacrifice?

MR. GIBBS: This is not totally resolvable. One of our major clients is very heavily involved in a stock brokerage distribution system, and in many cases they are selling the product purely as an investment. They have no expressed interest in the insurance, so, as you point out, they do put a great deal of pressure on the company for rapid issue. Another side effect of this is, because they are not used to dealing with life insurance applications, frequently their application development is not as good as it should be. This further complicates the underwriter's job because the application that he or she receives

may be totally clean -- there's no adverse medical history at all, and yet the MIB search or one of the other routine requirements, developed because of the amount, does turn up adverse history.

I don't have any magical solutions for doing as you suggested, streamlining this procedure. Underwriters have to do PR work with the field force, which in this case is stockbrokers, and try to make them understand what our needs are as underwriters, why we have to have good application development, why we have to order the APSs to clarify the medical history, and why we can't issue it overnight.

In many cases, in this type of market, if they develop adverse history in the process of developing the application, then in order to save time they simply don't continue to get the insurance product. They go ahead and move on to one of the other products that they have. So to a certain extent, they field underwrite, and if they see that there is going to be a delay because of history that they were not aware of, then they'll move to one of the other products.

MR. MOES: The solution here is not something that we're comfortable with as a reinsurer, but I often say that actuaries shouldn't be in the business of hoping. But so far, our mortality experience for one particular large client is very favorable. Howell, have you had any experience along these lines?

MR. MARTYN: I really haven't had any experience. I probably wouldn't make any differentiation at all between single premium and any other kind of insurance or application in terms of time service. I don't have any magical solutions other than the observation that if your average time service is three weeks, you've got a big problem.

MR. MOES: I have one question for Mr. Tullis. Mark, you did talk about monitoring results on the preferred standard risk classification. In your experience, would you say that most companies maintain the overall balance between X% of preferred plus Y% of standard equals what they would have expected if they hadn't made that split, or are you finding that they're ending up with an overall lower expected mortality, that is, a higher than expected preferred part to the mix than if there hadn't been any split between the preferred and standard?

MR. TULLIS: That's hard to say because a lot of companies I've worked with haven't monitored or don't have enough that they've written. My feeling is, based on a very limited sample, that the tendency is to underestimate how many people qualify for the preferred classification.

MR. MARTYN: Offhand, I would agree with that and I think it's important that too many people qualify rather than too few. If too few qualify you've got a marketing problem. If you've got a marketing problem, then you won't have the problem around very long to worry about.

MR. TULLIS: If exactly the right number qualify, in some sense it's not as important whether you set your selection criteria accurately or not. If too many qualify, it puts more pressure on your selection criteria so, I would agree with you. I had a little caveat in my presentation about how it wasn't terrible to have the wrong percentage qualify, but I think if too many qualify, you at least want to rethink what you're doing and make sure you're comfortable with it.