RECORD, Volume 24, No. 3*

New York Annual Meeting
October 18–21, 1998

Session 155D
Correct Number of Underwriting Classes

Track: Product Development
Key Words: Product Development

Moderator: MARY J. BAHNA-NOLAN
Panelists: BILL MOORE†
ROBERT M. CICCHI‡
Recorder: MARY J. BAHNA-NOLAN

Summary: Multiple-preferred, standard, and smoker underwriting classes are now common in the life insurance business. This proliferation of underwriting classes presents some interesting challenges for actuarial, underwriting, and marketing personnel. Debaters discuss the pros and cons of the multiple underwriting class approach.

Ms. Mary J. Bahna-Nolan: I am the product actuary at North American Company for Life and Health Insurance, a.k.a. NACOLAH. We have two guest debaters, both of whom are underwriters. Bob Cicchi, who will be debating for fewer risk classes, is assistant director for Individual Risk Selection at Principal Life Insurance Company. Bob is responsible for underwriter training and provides assistance on large complex cases. He spent two years in Mexico City working with Principal International. Prior to joining Principal in 1980, Bob was an agent for the Equitable. The Principal currently has one preferred risk class.

Bill Moore is vice president and chief underwriting officer for NACOLAH. He has more than 18 years of life insurance experience and has held key underwriting and management positions with Jefferson Pilot/Alexander Hamilton and American Bankers Life Assurance Company. In addition, Bill has managed reinsurance operations for Security Life of Denver and Phoenix Home Life. NACOLAH currently offers seven risk classifications, three of which are preferred. Bill will be debating for the more risk class side.

†Mr. Moore, not a member of the sponsoring organizations, is Vice President and Chief Underwriting Officer for North American Company for Life and Health in Chicago, IL.

‡Mr. Cicchi, not a member of the sponsoring organizations, is Assistant Director for Individual Risk Selection at Principal Life Insurance in Des Moines, IA.

Before our debate gets started, I would like to take a poll to see where we are starting from in regards to your feelings on the appropriate number of risk classes. How many feel we should have fewer risk classifications? By fewer I mean only one preferred risk class for nonsmokers or nontobacco users. About 19. How many feel we should have more than one preferred risk class? About 18. How many don't know? A few. We have some who didn't vote. I'll put those as a question mark. We'll see how the vote changes over time and if Bill and Bob can get us to change or make us sway our decision. With that I'll turn it over to Bob.

Mr. Bob Cicchi: I'm here to hopefully convince you that having fewer classes is really the right thing to do for the industry and for your company. When Mary called me to do this I said, "Well, what am I going to call this thing?" She said you can call it whatever you want, so I said, "OK, if you give me carte blanche like that I'm going to call it whatever I want." So, my initial comments are called, "Random Thoughts on Splitting the Atom or Why You Should Think Twice Before Having Multiple-Preferred Classes."

We're all familiar with the Manhattan Project, the U.S. effort to develop the A-bomb. We know from history that this project was successful. We were able to develop an atomic bomb and use it to bring about the end of World War II. I have no doubt in my mind that the successful development of the A-bomb led to many positive and beneficial technologies; technologies that have helped all of us lead a better life today. However, it also gave birth to an era of multiple threats and instability that are still with us today.

Now you may say, "Why is this guy rattling on about world politics and history at an actuarial discussion in underwriting classes?" Good question, right? I'm doing this because I think that there are similarities in the A-bomb example above and our current fascination with multiple-preferred classes. We know we can have multiple-preferred classes on our policies. This is a fact. Several of you work in that environment today. We also know we can split the atom. That's a fact. The question for us to ponder is, do we want to split our preferred classes into ever-increasing smaller subdivisions? Do we know where this will lead? Will it lead to an era of growth and prosperity for our industry? Or will it lead to a cold war with regulators and consumers? Where will this go?

No matter where you stand on the nuclear debate you can't argue that no good has come from our ability to split the atom. The same can be said about our limited splitting of the insurance population into insurable and uninsurable, substandard and standard, smoker and nonsmoker, and standard and preferred. Just like splitting the atom has brought us peace and many new technologies and benefits, so has our

limited splitting of the insurance buying public led to affordable insurance coverage for the vast majority of applicants. When I first started in our business we could proudly say that we took 90% of our applicants in our very best class. I don't think we can say that anymore.

However, we all know that unlimited splitting of the atom is lethal. Splitting the insurance population into an infinite number of preferred classes is also lethal to our industry. Why? Because even though we have the know-how to split the population into ever smaller subdivisions (you all can do it, we know it can be done), we can't be trusted to be responsible in our application of this technology, this know-how. Simply put, each company is being given their own atomic bomb. Who among us is the next Saddam Hussein? Theoretically, we can design a perfect world of multiple-preferred classes based on some logical and thoroughly designed pricing and mortality assumptions. That can be done; no question about it. Medicine keeps making great strides in the fight against diseases that contribute in large percentage to our early mortality and morbidity. Risk factors for disease development are refined and identified almost overnight. Multiple and lengthy studies on single factor and multifactor mortality experience are currently available. In a nutshell, we can do it.

Let's talk a little bit about what the producers want. Producers want multiple-preferred classes. They want it because anytime a company comes up with a better preferred class their job gets easier. For instance, they can lower the price on their product. It is also the flavor of the month. Everybody's coming up with multiple-preferred classes. Your agents may say, "How do you expect me to sell anything when I'm competing against a company with a super-duper-preferred class where the client gets the coverage for free and the producer gets a 1,000% commission?" You can't compete against that. Now, the customers love it also. Makes sense, right? A customer says, "I'm a runner. I don't smoke. I have a stress test every year. I have a normal physical exam including cancer screens every year. My parents are still alive at 110 and 108. I don't drink. I make lots of money in a stress-free job. My lab results are modeled at medical schools as what the ideal profile should be. I'm a perfect fit for your target market. Of course, I think I'm super-duper-preferred. If you don't take me I'm going to take my perfect business elsewhere. I pay less for insurance than you do. I live in a perfect, risk-free world." But we all know this isn't the perfect, risk-free world. Atom-splitting technology has fallen in the wrong hands already. There are countries and terrorist organizations that have this technology. It's just a matter of getting the right ingredients to join the nuclear club.

Who are the rogue states and terrorists of the insurance industry that would threaten the perfect balance of our super-duper-preferred classes? It is I. I have met the

enemy and the enemy is us. I know that scored points with the actuaries. In a theoretically perfect world, underwriters don't squeeze risks into a class where they don't belong. Real-world squeezing unfortunately happens all the time. Multiple-preferred classes magnify the impact of squeezing because the classes are smaller and the pricing assumptions are much narrower. Underwriters and underwriting tools are not good enough today to split preferred classes into ever smaller subdivisions. Yes, you can design the criteria to subdivide the preferred classes into ever smaller divisions, but the application of those criteria is not good enough. I can tell you with a high level of confidence whether a risk is standard, substandard, or uninsurable, and I think that just about everybody in this room could do that for you.

My confidence level decreases somewhat if I have to split my substandard class into multiple substandard classes. But since I'm usually dealing with a single impairment or disease that has a significant impact on mortality, I still can deliver actual experience that is close to what you priced. I think I can do that fairly well. My confidence level, however, drops significantly when you ask me to tell you what client is superpreferred, preferred, or select because I'm looking at several risk factors with a minute impact on mortality by themselves. Even worse, some of the criteria that I have to use are risk factors for developing something else that may eventually kill you, or you may die from something else.

However, the most compelling reason to slow down our spiral into ever smaller preferred classes comes from the regulators, legislators, activists, and our buying public. Year after year, public opinion polls tell us that the public is losing confidence that insurance underwriting is fair and in their best interest. Legislators have recently increased the number of bills and laws that restrict risk specification in response to activist pressure. By having multiple-preferred classes, we are adding fuel to the fire by "cherry picking" the very best risks and giving a small percentage of the buying public our best price and raising the cost of insurance for everyone else.

Instead of splitting our best class into ever smaller subdivisions, we should be focusing on how we can offer coverage to more people. Instead of crafting products and classes that have narrow target markets with poor persistency, why not try to make our products available to more people? Why not craft our best class so we can include more people in that class rather than fewer? I think we can increase revenues and raise our contribution to profitability if we have limited class splitting and make our products available to more potential customers.

We know from history that our ability to split the atom brought about the end of World War II. We also know it brought about the beginning of the Cold War and

the current unstable world environment of state-sponsored terrorism and multiple regional conflicts and flash points. If our industry is to prosper, we need to balance our drive to split our best class with an invigorated effort to make coverage available to more people. Be careful of what you split. You may start a chain reaction that takes you where you don't want to go.

Ms. Bahna-Nolan: I'd like to get comments and feedback from the audience. Of those of you who voted who thought we should have fewer classes, does anyone have anything that they would like to add in support of the fewer class argument?

Mr. Peter E. Whipple: One thing that I think is going to come about from having multiple-preferred classes is that it will increase the amount of shopping that goes on. Individual applications will be shopped to a larger number of carriers because there will be less uniformity in the final underwriting classification that people receive. Consequently, it will make sense to shop to lots of different carriers, which increases expenses overall for the industry to underwrite cases.

Mr. Georges C. Rouhart: My question is, "How will we ever know that we did it right?" As we split the mortality classes to many more classes, mortality studies become less available both in terms of credibility and time. And so, when we have ten classes, I just don't think that we'll ever be able to know if we've done it right.

Mr. Tom Bakos: I agree that the actuarial pricing function is fairly easy. You can define the classes and just expect the underwriter somehow to magically put people in the appropriate class. I agree that's difficult to do and I'm on your side—the fewer side. But there are some objective measures, smoking status for example, which could be used. Can you discuss that?

Ms. Bahna-Nolan: Actually, can we wait until we get into the question-and-answer (Q&A) session to do that? It's a good point though. Good question. Anyone else? I have one. What about agent and customer dissatisfaction when they don't get into a risk class that was designed to qualify less than 8% of the population? What about replacement activity as people are not placed into the best risk class and find out later that there's another company that has a better class with a lower rate and they think they qualify, increasing replacement activity? I'm not arguing for either side. I'm just raising some points that I thought about during the conversation.

Mr. Bakos: What if you do a mortality study and you find that your class two, which is second from the top, actually has a worse mortality than your class four? Then what do you do?

Ms. Bahna-Nolan: Anyone else? OK, with that I'll turn it over to Bill.

Mr. Bill Moore: Personally, it was easy for me to see how the multiple classes originated. I just simply looked at how many holes there were in my belt and as the scale kept getting higher I knew that I was no longer being classified as the best class. We just needed to add some more criteria so I could still fall in the preferred categories and so on and so on. So how this whole thing came up is directly related to the mass of an underwriter.

What are we really underwriting for when we're looking at multiple-preferred risks? Essentially, we want the cardiovascular risk and the trauma risk; that's all we're attempting to do. By having a multiple-preferred class, it addresses those risk factors that previously we didn't have sufficient data for. We do now, and just as any other underwriting tool that has been developed, we react to programs and put things in place so that we can deliver a better priced product for the client.

The true factor here is that we're continuing to try to deliver a competitively and equitably priced product for our consumer. We really are doing it no differently from underwriting that has taken place for quite some time. Let's take, for example, that broad category that we call substandard. Most companies consider that to be about a 16-class substandard, so we're really not doing anything different.

Let's take for example the coronary artery disease situation. It used to be that before my time, if someone had coronary artery disease, basically it was just declined. Well, that's not the case anymore. When someone had bypass, it was a decline. Again, that's not the case anymore. Now we have refined our programs so that if someone has coronary artery disease, we don't want to put just a table 4 on that risk. What we really are trying to do as underwriters is to discriminate effectively so that we can deliver the right price for the client again. To do that, we count the number of vessels. There's now a subset of a broader category that we've split into another class. Not only do we consider the number of vessels, we consider where in the vessel was the blockage and develop another subset of criteria.

After we've looked at that, we look at the left ventricle and ask, "What is its function? What are its pressures?" To answer that, we've already developed multiple class criteria in classifying risks across the board. I think that the situation here is one of let's not get hung up on the titles, let's get hung up on the pricing. It's not about whether a risk is standard or substandard any longer. It's about whether the risk is adequately priced and defined appropriately so that it is a competitive product that is equitable for the client and profitable for the company. When we look at those cardiovascular trauma risks, it really reduces all of this hullabaloo over preferred to a very simple situation; we're just continuing to do the best that we can from a risk selection standpoint with the information that we have at hand.

There's a lot of talk about the residual preferred classes and diluting or the deterioration of that residual class. Again, I think that one thing has to be considered here. Currently, when individuals are applying for one of the preferred classes they are thoroughly underwritten, particularly with full blood profiles, whereas before they may not have had full blood profiles done on them and were classified as standard risks. Now they're getting full blood profiles and some of them are moving into a table 2 offer. However, the standard class doesn't necessarily deteriorate as some have proposed.

I think too that if we look at what is transpiring, we have the capability now to look at the data and the statistics and follow it much more closely than I think underwriters have ever before. There are certain companies that track these results to see and make sure that their predictions are actually coming through with their qualification rates. That is a prime opportunity to make quick corrective adjustments to improve the profitability for each individual company.

Let's look at the marketplace and focus a little bit on that. If we have multiple-preferred risk classes, we have a much better shot at being able to open up new products. We have the opportunity to go into new markets that were previously unavailable to our companies, which directly results in increased premiums. The other aspect is that we can quickly get these products to market. It's not reinventing the wheel; it's simply altering the view of the criteria that we might be discussing here and redefining those criteria, putting another product together, putting it to market quickly, and still staying competitive in the marketplace, keeping that new premium dollar in force. A product no longer takes three to six months to get to market. We can now make quick changes, modify the product, get it to market, and know that it's more profitable than it was when it was originally rolled out.

The other aspect I think that is often overlooked in multiple-preferred underwriting is what it is actually doing for the quality of underwriting itself. Again, we're getting much more information and many more statistics assembled. For the first time in a lot of situations, actuaries and underwriters are actually sitting down together and realizing that it takes two pieces of the puzzle to really make this thing work well. I think that the underwriting population is learning a lot more about actuarial science and I'm hoping that actuaries are learning an awful lot about underwriting in this process, which can only help our industry as we all develop further in those areas.

I think there's a lot more communication among underwriters with respect to the preferred classes because of the distinctions of making certain that there is consistency. With that aspect, underwriters will consult with underwriters, case clearance will be held, and the development stage of underwriters can increase at a

faster rate than it did previously. A lot of companies have also devoted additional research in this field. Prior to this, when money got tight, research oftentimes fell short in the underwriting department. But I think that this whole multiple class preferred has allowed us to refocus some of those resources back into a research environment so that we do have very valid statistics that the public can start to rely on that we truly do know what we are doing.

With respect to agent relationships, there's also a lot of talk about how difficult it is to have an underwriter communicate what might be perceived as an adverse underwriting decision. Multiple-preferred class underwriting is no different from regular underwriting or fewer classes underwriting today.

An adverse decision is an adverse decision and the underwriter has to be prepared to sell that quote just as much if it is a table 2 as they do if they move the risk to a preferred plus instead of being the best class.

But again, those skills and those talents are now being learned by underwriters at an earlier period in their careers because the less-experienced underwriters tend to be the ones who are screening these cases. Now their knowledge and development comes along much more rapidly. When we have more opportunities to discuss these cases with the agents, those are what I refer to as moments of truth. Let's face it, when we're with our customer that's when we can do our best to sell them on our company and who we are. Anytime that an underwriter has the opportunity to speak with that agent, he or she also has the opportunity to put the company's best foot forward and develop that relationship into a very strong partnership arrangement. However, if the underwriters are not involved in the process, some of that opportunity to develop and strengthen those opportunities with the agents is lost.

With respect to technology I think that the multiple-preferred classes have been a challenge, but I think the technology world has stepped up to the plate and tried to make that as helpful as possible. Just at the National Institute of Home Office Underwriters meeting this week, there were probably eight different information technology vendors that had various versions of how they could help support the discrimination of classes in the underwriting arena.

That is significantly different from past years. I think that brings us to the forefront of looking more at a transaction-based environment. When our industry was being threatened by the banks, which are very transaction-oriented, I think that the multiple-preferred classes had a side effect of showing how we could be able to discriminate more quickly and do processing more effectively, efficiently, and faster.

It has helped broaden our competitiveness with respect to our financial marketplace.
Last, in regards to genetic testing, which is a very difficult topic (and I don't want to even begin to discuss that), I think the entry of multiple-preferred class underwriting is a great opportunity for us to show the public that what we are doing is discriminating to actually price the risk according to what statistical evidence shows. That will then help us open the gateway to the genetic testing, which is exactly the same thing.

So we wouldn't want to eliminate the BRCA marker simply because we're saying that it's too discriminatory. I think that it would be in our best interest to say that the industry is tending to be more discriminatory so that it positions us better for utilizing appropriate genetic testing and maintaining competitive pricing and profitable products.

Ms. Bahna-Nolan: How about some comments from the audience?

Mr. Dale S. Hagstrom: Whether or not the "industry" should or shouldn't do this, individual companies clearly should. Not only can they replace others that don't have multiple-preferred class underwriting, but they will bullet-proof themselves from being replaced later if they've acquired the right knowledge at the time they do underwriting at least.

Ms. Bahna-Nolan: So you're saying companies should do it more as a defensive mechanism to keep the business on their books?

Mr. Hagstrom: Yes.

Ms. Bahna-Nolan: OK.

Mr. Manny Vee: I'd like to applaud Bill Moore's comments. I think your comments indicate that the underwriting profession is trying to increase the number of consumers who can have life insurance available to them. I also applaud the fact that you said we should price these properly. You mentioned two issues that preferred pricing is supposed to address—the cardiovascular risk and the external cause mortality risk—yet the two main causes of death in the U.S. are cardiovascular disease and cancer. Yet, I don't think there's anything in preferred criteria that addresses the cancer risk. The other comment I'd make is that a lot of preferred criteria use cholesterol as an indicator of being available for various preferred categories, but I think it's fairly common knowledge that cholesterol measurements can be relatively variable from day to day, week to week, year to year. Any comments about that?

From the Floor: Some companies that are underwriting for preferred basis look at cancer by researching family history. I think family history is a very strong criterion for preferred criteria, yet, on a personal basis, I know of three situations where individuals died of cancer in their 40s and 50s with no family history.

One can always find anecdotal cases that are the exception.

Mr. Stephen A. Hardacre: Certainly, I agree that it's tough for the underwriters, without having a lot of preferred classes, to sell a substandard case. But, I think when you have a lot of preferred classes, besides having to sell the true substandard cases, they're also doing a lot of handling and shopping across the classes. So I feel there's a lot more work involved when you have a lot more classes trying to justify being in class one, two, three, four, five, six, seven, eight, nine, or ten than there is in just having a standard and a substandard group.

Mr. Martin Witt: I have a number of comments. In the U.K., when we went into this, we actually found that it just withered on the vine and died. Once we realized that age was less of an impact, the price of the standard fell and became cheaper than the preferred lives standard. So, there was no incentive. These people kept changing their preferred rates, but the standard rates were also falling at pretty much the same rate. So it sort of withered. But there are a number of specific points. When we looked at it, we worried about dealing with young lives because the preferred criteria should be different from middle-age and older lives. At each age band for each term, you really should be thinking about the causes of death and looking at how to differentiate the causes; they are very different according to a person's age. For people who have low sums assured, the costs involved in this are just too great. There are a lot of people who should be insured, but not for amounts that don't justify these expenses.

As you start to differentiate, I suspect the extra costs of doing the work, plus the nontake-ups as we mentioned before, will exceed the price advantage. In the U.S., you used all these one-year select products where every year you could reapply and get select rates. And, if I remember correctly, companies really got burned heavily on that. Are we really moving back into that approach? I worry about the complexity of the quotation. In the U.K., you have to assess the needs of the individual and explain why the product is suitable for them. And I suspect, unless you have good laptop systems, you have incredibly complex quotations. I know you were talking about those people who already had disease, but most people you look at don't have that level of disease, yet we still have to make sure that their expectation of what their rate will be proves to be close to actual. In the U.K., we have a disability discrimination act that says if you're going to do it, you must justify

it by statistics. And those statistics have to be brought, if necessary, before a court of law to prove that they are valid.

That's term insurance, but what should we do about critical illness? Why don't we do the same for that? We've tried that in the U.K. What about individual disability business? Why don't we do the same for that? What about long-term care? Once we start on one, we have to start thinking about the others. I used to be a preferred life man, but I've converted and become much more socially acceptable in society by trying to get more people to have coverage because you realize that the people who need coverage have to be cross-subsidized by those who can afford to pay a bit more.

Mr. Bakos: I think the basic concepts of fewer rather than more are worth discussing a little bit just logically. Fewer obviously has an absolute limit, one. But does more have an absolute maximum? And the "more" classes you get, are you not destroying the basic insurance principle of lumping lives with similar risks together? The more classes there are, the more distinct the mortality in each class becomes. I'm probably grossly exaggerating, but I suppose, theoretically, with genetic testing you might at some point be able to pinpoint exactly when an individual will die. Wouldn't that destroy the need for insurance or make a person uninsurable or uninsurable at an affordable rate? Sometimes it's helpful to look at the extremes so that perhaps when your time comes to speak again you might address the concept of how many more.

Mr. Raymond E. DiDonna: Just to comment on your point, Tom. I don't know how many classes there should be either. I do believe more than one preferred class is appropriate; I don't believe infinitely more classes is appropriate. But if you want to make a comparison of how many preferred classes you might have and how finely you've dissected your standard population, you can still go back to the substandard argument where you've taken 5–10% of your people at most and dissected them into as many as 16 classes. Do we believe we have the credible experience to bear that out? Let me make a couple of comments on two points you made earlier. One was agent dissatisfaction. I think if you go to super-preferred and preferred and someone doesn't get the super, they get the residual. You have to weigh that against not having the super-preferred and the clients going elsewhere in the first place. The other point was replacement activity. What we've observed is very, very good lapse experience on preferred term products. I think that just comes down to people not wanting to get underwritten year after year to save $40. As we fine-tune the products or as products are fine-tuned, there might be 5 cents per 1,000 better premium and another 4 cents per 1,000 as companies have ratcheted it down. I don't think people want to get underwritten year after year to save that amount.

Mr. Bakos: We debated this before. There are typically 16 substandard classes. The range is from standard to four times standard. How much better than standard will the best preferred class be? If the best preferred class is one-fourth standard, you may have a valid argument. But right off the top of my head I don't know. It could be a smaller range or division.

Mr. Witt: I can slightly answer that. When we did our studies, we looked at the multiple risk factor intervention trials, which at the time had been running for about 12 years. They broke into quintiles by cholesterol and blood pressure, and what we found was that the lowest cholesterol and blood pressure quintile had 1/20th of the deaths from coronary heart disease than the highest quintile. What was interesting was that the highest quintiles still probably would have been accepted by us in the U.K. as a standard rate. So you had from 20 to 1. If you separated it out by smoking, it was still from 10 to 1. The 10 going to 20 was really the change from smoker to nonsmoker. That is still quite a substantial difference from coronary heart disease, but, of course, there are other causes of death as well.

From the Floor: My question is for the fewer team. Where do you draw the line? Why do you even accept the preferred class? Why not just cut it off at standard?

Ms. Bahna-Nolan: Can we answer that during the Q&A section? I can raise one point in favor of the more classes—I would argue it depends on your distribution. If you're heavy into the brokerage market where a lot of your products are on a spreadsheet or advertised over the Internet through the quoting services and you don't have a multiple-preferred risk class system, you're not even going to show up on the radar screen; no one's even going to look at your rates.

Mr. Ronald Punofat: My comments are a bit different, I guess. In response to the comment that there will be more shopping around, I think personally there will be more "Clinton-speak," which is that people, if there's something to gain by it, will try to give the answer that will give them the best class. It's my impression that people will not try to be as truthful as possible if they know there are 15 rating classes. I'm not against or in favor of preferred lives. I think the consumer gets confused. If a company wants preferred lives, it should be very clear that it only wants preferred lives. If a company wants the worst lives, it should be very clear so that no one is confused. Of course, any company can have 15 classes. But when someone walks in the door, they know basically what they're catering to. I don't know if that exists in the U.S. But anyway, that's just my impression.

Mr. Joe Colodnay: Martin can probably comment more explicitly about the issue of genetic testing because I think in the U.K. they just don't want it or allow it. In the

Actuarial Club of New York meeting last year, there was a discussion on genetic testing. There was a consensus that said as far as living benefits go such as health insurance and disability, it may have some value but with respect to life insurance per se, the continued development of family history, medical exams, pending physician statements, and whatever's required in the normal underwriting process is probably going to pick up most of your problems. The idea that somebody is going to go out and find a genetic marker that he or she may or may not get Parkinson's or multiple sclerosis in 20 or 30 years is by all means not a certainty. I guess the best argument to be made for the theory that there could be antiselection from a genetic testing point of view by the prospective insured against the company is that maybe he or she will go out and buy a life insurance policy 20 years in advance. So I question sincerely the validity of genetic testing for life insurance applications. There is also the whole issue of consumer reaction, i.e., potential federal regulation. It's bad enough now when people are talking about privacy violations from HMOs and nonmedical professionals. When you start talking about genetic testing for life insurance applications, I think you're going to get a very negative consumer backlash.

From the Floor: The problem of consistency in the definition of preferred class is with all these multiclasses between different companies. We found that once we start to develop a preferred class and want to focus on it, other companies have different definitions of what the preferred class is. We're almost thrust into the position where we have to start to consider other subdivisions of that in a nonending situation. What Tom says, that it's because of competition, may make the most sense for the whole industry. It's only the competition that's forcing us into this type of a situation.

Mr. Timothy F. Twiss: I'd like to strike just one small optimistic note. Perhaps the low rates that are a byproduct of all these super select classes might interest a segment of the population in buying insurance who otherwise would have said, "It's really not for me; I don't need it. I'm single and have no obligation and I'm healthy." Now the rates may be so low that we're actually bringing some people into the market who we actually want in there.

Ms. Bahna-Nolan: We'll have a chance again to have more comments and questions. But I'd like to give Bob and Bill a chance to respond to some of the comments and to each other. So I'll let Bill go first.

Mr. Moore: With respect to the answer, I think that it's pretty evident that we do not have effective testing to screen out cancer. Family history, in essence, is the only one that we have. Going out on a limb here, I might even add that in some ways family history is genetic testing in that we certainly will know that we're

dealing with a genetic trait. We are making underwriting decisions on that every day now. So I think that genetic testing is here in the life insurance industry already. With respect to the cholesterol levels varying, that is true, but, again, in an underwriting environment everything varies. Our jobs as underwriters are to look at that risk as a snapshot of that day and to hope that we'll be able to see some trends as clearly as possible and apply statistical information to make the right predictions with respect to this case being one that will go in one direction; this case may go in a different direction. So predictability has always been a part of the underwriter's job and always will be.

As far as the cost goes with respect to processing these cases, I think technology is doing an awful lot to reduce that cost. Again, I would say that the systems available right now are all gearing toward the multiple-preferred classification scales. The only cases that an underwriter will have to look at in the future are those where there is true human judgement that will need to take place. Not only will the cost be lower, but consistency of the quote will even increase with respect to that.

Looking at the requirement situation, what underwriters look at every single day is not definite. We're looking at what is the protective value of this particular requirement. In other words, if we have an abnormal liver function test an underwriter has to look and say, "Well, what is the age of the individual? What is the lifestyle of the individual?" and put some pieces of a puzzle together to make an adequate judgement decision. In no way, shape, or form do we ever have the right answer or know what the final outcome will be. One exception was when the uninsurable category was developed on the last-to-die. Then underwriters did get to become God because we knew exactly in what two-year period that person was going to die. With respect to preferred risks, we don't do the same type of underwriting.

The solution to the concern over the confusion with the consumer resides with the agent training and the field training. I'll leave it at that.

Mr. Cicchi: Let me ask you a question first. How many of you have purchased insurance in the last ten years? How many of you bought that insurance from a broker? Okay, let me refine the question. How many of you bought the insurance from the broker because of products or because that broker absolutely did all the shopping for you and got you the very best price? Not a single hand. I think that gets to the whole distribution argument. Insurance is still sold and still is a relationship sale, no matter what anybody tells you. The market that we're talking about with the broker spreadsheeting a number of quotes is a tiny, tiny, tiny subset of the insurance buying public. We have to be careful that we don't craft products

and drive the industry in a direction that's going to please a very small segment of our population. I really have a problem with that.
We have touched on genetic testing. I'm very close to that issue; I have been following it for my company. And if multiple-preferred classes scare me, genetic testing absolutely frightens me. It could very well bring about the end of private insurance as we know it today. So I'm scared to hear genetic testing and preferred classes mentioned in the same presentation. That's exactly the argument that activists are making, that we will use this genetic testing inappropriately. We won't define what inappropriateness is, they will. They will define it in an activist political environment where, believe me, the ACLI is fighting a battle in just about every state in the union with them. So it's scary to think about genetic testing and multiple-preferred classes.

To the issue of coronary artery disease and accident risk, I agree that most of the preferred criteria is getting at that, but I think the gentleman in the back made the very good argument that people do die from other things—cancer being the biggest one. We can sit here and debate the percentage mortality of the buying public that dies from each different impairment, but the reality is that we're looking at setting our preferred criteria and looking at very, very narrow risk factors that really have a minute impact on mortality by themselves. We talked about cholesterol a little bit. Cholesterol by itself does have an impact.

You're going to have different mortality there, obviously. But there's a number of studies that show that it is not an independent factor. People who have high cholesterol also tend to be obese and have hypertension. You have all of these factors that are coming together. I'm not good enough to tell you that I can identify what level of cholesterol is going to effectively translate into a higher mortality. I don't think that there's anything out there that specific. If anything, you have some clinical studies. Now if we want to hang our hats on clinical medicine, that's fine. I think that we do some of that, but we just have to be careful with it.

There's a question about what are fewer preferred classes. Why are you defending that when in reality you should just be either one class or multiple? I think the answer to that goes back to the market realities. Obviously, we all live in the market and realize that that's there so you're going to have a certain amount of market responsiveness. I think the only thing that I'm saying is that we need to be cautious not to get into that infinite splitting of the preferred class. I think that's a problem. Is eight classes too many? I think so. Bill's company doesn't think so.

Ms. Bahna-Nolan: We only have seven classes; we also feel eight is too many.

Mr. Cicchi: I think that three and four might be too many. The issue of distribution drives that obviously. Which market are you in? Are you in a market where more of a consultative approach to a sale is really what you're after or are you out in the sale where it's just strictly price driven? Your distribution network drives a lot of those things.

A comment was made that as an industry we all realize that we really don't need to go in this direction, but as a company it's a defensive measure and you have to do it. But who is the industry if not each one of us? At what point in time are you going to be able to say enough is enough? No, we're not going to just be responsive to what the producers want to the extreme. Yes, we want to be responsive and try to work with them. But we have a responsibility also to price the product and deliver the results properly so that the promises that we're making are kept. The companies are making promises, and I think that we need to think about that. I'll stop right there.

Mr. Witt: One of the points that I felt that perhaps we should have talked about beforehand was that when we actually look at the cause of death, the improvements in mortality for each cause of death will be at different rates. If we look at, say, coronary heart disease—and I'm using U.K. experience here—there's considerable improvement. The cancer rate has actually declined, yet the incidence of cancer is increasing. What you look at today may actually not be true in the future, and if you're looking at 20- or 25-year contracts you should actually have lower rates of mortality improvement for the best preferred lives and higher rates for mortality improvements for some of the worst lives. Joe Colodnay mentioned genetics and, again, from the U.K. point of view, what we have learned is that we have to respond to what society wants. Society has told us not to do genetic testing. We know that if we stop someone from getting a mortgage because we won't give them life insurance because of a genetic test, we will be hanged, drawn, and quartered. We've responded, I hope responsibly, by saying that we will not seek genetic information. When the individual knows about a genetic test, we ask them to disclose it, but we ourselves will not seek that genetic information. That's for life insurance; clearly the issues for critical illness and long-term care are very different.

I also want to pick up on a point about how you can train agents. Many people just don't know what their blood pressure is. How many people actually know what their cholesterol is? You can't go up to somebody and ask, "Do you know your blood pressure and your cholesterol?" and then grade them. The other point is that cholesterol is not really the measure. The measures are high-density lipoproteins (HDLs) and low-density lipoproteins (LDLs). So when we do a test we're refining it to the point that we're actually measuring the LDL because that's the real issue and concern. Otherwise, we're misclassifying somebody based on their cholesterol

level, which could be high just because they have the wrong ratio of HDLs to LDLs. So that would be incorrect. Also, it probably creates unreasonable fears in individuals, which general practitioners then have to deal with.

My final point takes us back to verification of results. There's no point in having a measure that we can't verify so you can use things such as, "Have you ever smoked?" How do you know if someone's told you the truth or not? You're not going to know the answer to that unless they had a smoking disorder that was disclosed when they went to see their doctor. To some extent, you need to limit what you do by the ability to verify the results that you get.

Ms. Bahna-Nolan: I'd like to comment on one of the issues you raised with respect to the total cholesterol—the HDL/LDL ratio. Most of the guidelines that I see, not all of them, do have a total cholesterol to HDL ratio. Whether the relationship between that and the overall cholesterol level is reasonable, that still remains a question. A lot of the criteria do use the ratio as well as overall cholesterol.

Mr. Cicchi: You can get into a situation where you can have a normal HDL/LDL ratio and also have an incredibly high total cholesterol. And I contend that that has some extra mortality. Yes, I understand what you're saying and you're right—the agents will not know the answer to that.

Mr. James C. Hackard: I'm not sure that any of us know the correct answer as to how many underwriting classes are correct. If our job is to classify risks and then charge an appropriate premium for those risks, I think the more knowledge we can gain of the underlying factors that go into the cost is to our benefit. If we eliminate classes and the discrimination of those classes in the underwriting classification, how will we ever develop the statistics to justify making discriminations like that if we're allowed to do that? If there's no need from an underwriting standpoint to know what a person's cholesterol level and HDL/LDL ratio is, why would we gather those statistics? And when would we know that that's an important discriminator between classes of insured lives?

The other point I'd like to make is that if the reason that we say we don't want to have multiple classes is because we fear federal intervention telling us that we cannot do it because of unfair discrimination. Are we abrogating our responsibility to stand up for what is a fair discrimination in setting price? And if that's the case, then why bother?

Mr. Thomas E. Rhodes: I have a couple points for Mr. Moore for more classes. First of all, isn't a lot of the preferred class underwriting dependent upon the level of underwriting that you use? For instance, if you have a simplified application

process with little underwriting experience behind it, wouldn't that argue against having such refinements in preferred classes? My second point concerns the validity of having many different preferred classes. Currently, we're designing mortality studies to use laboratory results to evaluate the different preferred risks. I know of very little data that can be used accurately to measure the different preferred risks. I believe you stated earlier in your initial comments that you could validate these different preferred classes. I'm curious to hear how you validate them.

Mr. Moore: For the validity of the statistics I think one of the best studies that we have is the SOA study. Is that still in draft form or has it been released yet?

Ms. Bahna-Moore: It was released at the meeting here.

Mr. Moore: That's particularly one of the better sources I think of seeing the trends and what's happening in the preferred marketplace. But that certainly raises a point that I don't think anyone would argue with; that there's insufficient data out there to know whether we're moving in the right direction or not. However, I think there's enough evidence out there to know that it appears that we are. Again, it does come down to how clearly it can be defined. We're not sure, but that's kind of what risk selection is anyway. We're never working in a definite world—we're working more in a gray area and a judgement area. With respect to obtaining the information, I would never recommend setting preferred criteria based upon information that is not gathered at the time of evaluating the applicant for an insurance risk. In other words, if a company chooses to use a driving record as part of that screening process, then certainly there ought to be information and investigation with respect to that driving record. Is that what you were asking?

Mr. Rhodes: Yes.

From the Floor: It seemed to be that when we went over the smoker/nonsmoker classification there was a real push to get people to recognize that there was a real difference and that they ought to consider the health impacts of smoking. I think that any classification we can do really does serve a public purpose, and we ought to consider that.

Mr. Paul J. Strong: I'd like to piggyback on the thoughts of the gentleman two comments ago. I think one of the primary responsibilities of the pricing actuary is to make sure that the underlying assumption in the product and the underwriting process align fairly well. And I think what we have to use now is more speculative than the kind of mortality assumptions we've used to date, certainly in my career. Ironically, we're applying that also to the longest guaranteed products that I've ever

had to deal with, so there seems to be a real disconnect where we're really having to be very speculative with mortality assumptions and then turning around and applying them to, as I say, this "locked-in" product. In some testing that we did, we found that with very little variation in the actual mortality, experience from pricing morality assumption financial results turned out to be very bad. That includes even passing off 80% of some of the risks to the reinsurer. And, even so, as little as a 10% deviation from our actual results from what we had priced in the product turned out to be very negative. Now, to finish off my comments, I'm a proponent of expanding the classes, and I think that we need to work to find responsible ways to do this. We don't want to pass through companies and leave messes for people to clean up five or six years from now, which seems to be a common practice in our industry. I'd like to find a way to get to that point. At the least, at this stage I think it's the responsibility of pricing actuaries to make sure that they pass onto senior management what the real risks are and what the unfavorable results might be if our guesses don't turn out well in these "locked-in" products.

Mr. P. Andrew Ware: I just wanted to piggyback on the comment you made about the cancer screens, one of which is family history. The other one that our doctors want to use is complete medical exams, including prostate exams for men and breast exams for women at higher ages and higher amounts. We're having a little bit of a dispute with our field right now about whether we should be requiring those or not. They're obviously not pleasant things. I was just wondering if people know whether their companies require these exams at higher amounts and sizes. Just a show of hands? Nobody? OK, that's what we've been hearing.

Mr. Cicchi: I don't know of many companies that are doing that.

Mr. Robert J. Johansen: First, on genetic testing there was a symposium last March and a paper that I wrote included in the papers that are being published this year in the *North American Actuarial Journal* and also by Georgia State University. My position was that we don't need genetic testing to underwrite successfully, and we probably won't be able to use it at least for life insurance.

On the preferred risk, I think you have to look at the variations that you get in the examinations and what's submitted on applications. For example, traditionally doctors have put in for blood pressure 120 over 80, and I dare say a substantial number still do that. I doubt if you would get an application that would say the person's blood pressure was 123.5 over 73.1, so they just put in 120 over 80 for anything within what they judge to be a normal range. There are other factors too. For example, we're told that if you drive a truck you have a smaller chance of being killed in an accident; therefore, sport truck drivers should get a better preferred risk.

Mr. Moore: Only after taking methamphetamines to stay awake.

Mr. Johansen: But there are other factors too. There's a government study of U.S. population by race, sex, and age group which shows that married persons have mortality rates that are half that of single, divorced, and widowed persons. So you might have to take that into consideration. And, of course, we know that there are variations in mortality levels by state. So a company writing in the north central states might have a very natural advantage in setting its preferred rates. But I do think that we have to look at the practical side of what we are given. You're not going to invite your very large preferred risk applicant to come into the home office and be examined by a cardiologist, an oncologist, a psychiatrist, and so on. With all matters of chemical tests, it just isn't practical. And I think you also have to look at the standard deviations of some of these impairment factors, including blood pressure and standard deviations of mortality rates. We're still using the 1980 CSO, and I would like to ask for some comments maybe on how many preferred risk tables we should have in new CSO tables.

Ms. Bahna-Nolan: I don't think anyone knows how many preferred classes we should have in a new CSO table. I don't know that the industry has sufficient experience to break it up entirely, since the CSO is meant to be more of a conservative table. But that does lead me to two questions. First, how many valuation actuaries or appointed actuaries are in the room? A couple? How many of you are pricing actuaries? How many of you have read the latest version of XXX or have been following what's been happening? Most of you know that, at least with what's currently proposed, there's going to be more room for the valuation actuary or an appointed actuary. They are actually going to have to opine on the appropriateness of the mortality that they're using for deficiency reserves. We, as pricing actuaries, are, I'm sure, going to take advantage of the fact that we now have a little bit more leeway in the deficiency reserve portion of both low-cost term insurance and universal life insurance. But I would argue now that the appointed actuary is probably going to have a much bigger say in how many classes we have and the appropriate level of that mortality.

Second, how many in the room are illustration actuaries? I'm surprised that no one raised the point that with more and more preferred classes it makes the illustration that much more difficult; it adds cost and additional processing because applicants apply for the best risk class and we need to redo the illustration. That's just another area to consider. I have time for about one or two more questions or comments.

Mr. Bakos: Just to point out perhaps another potential inconsistency. As you get more and more preferred classes, the best preferred class has some pretty good mortality but is anyone considering in those companies that have a lot of preferred

classes how that best class preferred mortality relates to your accidental death benefit mortality assumption? Is there some inconsistency there?

Ms. Bahna-Nolan: I can speak in general terms for our company. We have taken a look at that and isolated the accidental death mortality versus the nonaccidental death or the overall mortality. I won't say what the relationship is, but it is something that you need to look at and consider and make sure that what you're using is appropriate. One more question or comment.

Mr. Hardacre: One comment. I come from Canada, so it's not really clear to me. In the U.S., is it really standard to have strict criteria or do you allow exceptions? And if you do allow exceptions, how do you handle them?

Mr. Cicchi: It's strict, isn't it Bill?

Mr. Moore: It's probably more strict than a lot of people think. I think, once again the exceptions are the ones that you hear about. The loudest complaining agent is the one who everybody talks about in the home office. That doesn't necessarily mean that there really are that many exceptions being granted. When you look at a shop that might be evaluating 50–70,000 applicants for preferred criteria, very, very, very few of those really are brought to a level of saying, "Hey, this one needs to be an exception," providing, of course, that you have a well-trained underwriting staff who knows how to really do risk appraisal on a preferred block of business. There are a lot of judgments made even though a company might stick to their very stringent criteria. At least in NACOLAH, it's always up to the underwriter. They have the latitude to exert judgment once they've reviewed that case as to whether they think it falls in a class to one side or another of where the guidelines are. From that standpoint, judgments are applied in making the quotes to the preferred criteria. They are not widespread obviously, because we have to make certain that we are meeting the qualification rate that we priced the product upon. But there are judgements applied to it. So, yes, there are some exceptions as well, but I think the best way to minimize those exceptions is to make certain that you've communicated very clearly what your criteria are to the field up front. Then when they do come for an exception, if they don't have any other legitimate reason or if they don't have a mortality-based reason to make that exception and the company chooses to make that exception, it has to be communicated back to the agent that it was done for business and not mortality reasons. That's where I think it minimizes the number of exceptions that come through.

Mr. Cicchi: If I can add to that a little bit. I agree with everything that Bill has said here. Maybe it's the only time we're going to agree. I think that it's really dangerous, obviously, once you get into making the exceptions because, as the

gentleman pointed out, just small deviations in the assumptions have a significant impact on your profitability. I contend that whenever we get to apply that judgment the tendency is obviously to move people into the better class rather than move people out of a better class. And that's at least one of the things that I try to train our underwriters: If you're going to move people into it, you have to be willing to move people out of it. You have to be in a zero zone type of deal; otherwise it doesn't work. And I found that to have a very effective argument in talking to producers when saying, "OK if I'm going to take this case in our preferred class what other case do you want me to move out of there? Which one of your cases, not another agent's case?"

Ms. Bahna-Nolan: We have a few more people in the room I think than we did before so the numbers are probably not going to match up, but I'd like to take another vote and see if anything that we've talked about has persuaded you to one side or the other or if you're now more confused than you ever were before. So let's take a vote for how many still think that we should limit the number of preferred classes. About 35. How many people think we should have more? About 20. How many don't know? How many are confused? Only one, that's pretty good.