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Joint and Second-to-Die: Pricing Assumptions Revisited

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Summary: Now that we have a little experience, how have we done? Has the underwriter been able to achieve the required level of mortality experience used in pricing the products? What changes in product design can be anticipated in the future? Are the reinsurers comfortable yet?

Mr. Michael S. Taht: The second-to-die products have been with us for a number of years. They've been issued for almost 20 years now and, therefore, we should have a fair amount of experience to draw on when it comes to pricing and developing these products.

We're going to look at some of the common product features, some of the challenges that we come across when underwriting these products, and some of the challenges that are faced when pricing these products.

One of the points that was made at the luncheon session is the importance of communication between the actuarial area and the underwriting area. I think this product and the development of this product really highlights the importance of that communication. Underwriters needs to know how the product is priced. They need to know the level of pricing margins, and have an understanding about the

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mortality underlying pricing. The actuary, when pricing a product, should have an idea of the expenses, the cost of underwriting this product, and some of the common impairments that the underwriter sees.

We're lucky to have two underwriters join us and discuss some of the underwriting challenges and the product features of this product. Jerry Bender is lead senior underwriting consultant of the western region for Security Life Reinsurance. Jerry is responsible for all underwriting activities and customer relations in the region. Jerry has been with Security Life for seven years, and has been in the underwriting profession for more than seven years. He's both a charter life underwriter and an Fellow of the Life Management Institute (FLMI).

Karen Engler is an underwriter consultant at The Mutual Group in Fargo, North Dakota. Karen has been an underwriter for 14 years, and has underwritten life insurance business for both the direct and the retro side. She has achieved both the Fellow of the Academy of Life Underwriting and FLMI designations.

I'm a consultant with Tillinghast-Towers Perrin in Atlanta.

Mr. Jerry Bender: We're going to talk about the joint and second-to-die product, also known as joint survivor or survivorship insurance. This product is here to stay. That's because it solves the need. As an old Iowa football coach would say, "It scratches an itch." And that need is the estate transfer need, but there are other needs, and we'll talk about those a little further into the presentation.

The "baby boomers" are moving further through the continuum and getting to a point where they're starting to think about their retirement needs. Their parents had already started the retirement planning process at an earlier time. Those that didn't probably have started to have some problems that have come to the surface and, hopefully, the baby boomers have noticed their parents' problems and will take steps to do something different in their lives.

Recently, the U.S. Census Bureau came up with some statistics, which happily I ran across. I thought they were very appropriate to this discussion. In the summer of last year, there were nearly 34 million people in the U.S. who had reached the age of 65 or more. Of that group, about 3.7 million are now age 85 or more. That number will continue to grow. By the year 2030, that number will have more than doubled and reached about 69 million. The over-age-85 group will have risen to about 8.5 million by the year 2030, and by the year 2050, that group is going to be increasing about five-fold and is estimated to reach about 19 million.

I thought it was interesting that our keynote speaker made the comment that it's very possible that there could be a dramatic increase in mortality improvement in the future. And if that happens, then these statistics will be on the low side, which will continue, of course, to create the challenges that we're going to be dealing with for the next few years.

Karen has a little information about some of the dollars that this group will be controlling.

Ms. Karen J. Engler: According to the 1988 census data, baby boomers control about $3.2 trillion (or 38%) of the total household net worth in the U.S.

Studies are showing that this group is expected to inherit, in the next 20 years, $5–11 trillion. Furthermore, the top 1% of baby boomers are expected to receive one-third of the amount transferred. That market is just going to continue to get bigger and bigger.

I'd like to survey the audience. How many of your companies are selling a second-to-die product? Most everybody is. As far as age limits, how many of you are underwriting people over age 75? Over age 80? Eighty-five? Anybody over 90? So that's kind of the maximum. Think about the fact that just ten years ago, we probably weren't underwriting people over age 70, or not that many. So this has really changed the underwriting practices quite a bit.

I also have a lot of information on a survey that was done by the Life Insurance Marketing and Research Association (LIMRA) at the end of 1996. I'll give you some of the results that they found. LIMRA surveyed 114 member and nonmember companies on their survivorship and first-to-die life insurance sales. Sixty respondents currently market survivorship life, and 33 market first-to-die products. The main results they found from their survey were that a constant group of participants showed flat survivorship sales for both new annualized premium and number of policies sold. They also found that while traditional whole life survivorship sales are down, variable and universal life (UL) products are on the rise and show potential for growth.

Six of this year's eight participants that offer a variable product introduced it within the past two years. They also found that first-to-die life showed growth in annualized premium, face amount, and number of policies for the second consecutive year. Also, they found that out of all the survivorship products, UL was the most popular, second was whole life, and then variable UL was last. Seventy-seven percent of the survivorship products being marketed require one life to be insurable, and the remainder require all lives in order to be marketed.

Their target areas were estate planning (the most prevalent) for the affluent market, and then business insurance, such as insurance for family-owned businesses, small businesses, buy/sell, and key person. What was the average size policy? Out of 52 companies surveyed, the average size policy was about $1.2 million. This product definitely has a higher average face amount. The premium per policy runs around $19,000, and the premium per thousand was about $15.87 per thousand.

We're going to talk a little bit about product features of the second-to-die market, some of the challenges and myths of this market, underwriting for the elderly, and financial underwriting in a large case capacity. Michael will talk about some of the pricing challenges we see as we go forward.

Mr. Bender: As Michael had mentioned earlier, the product has been around about 20 years or so in one form or another. Our company, Security Life of Denver, our direct writing side, actually came out with the product in the early 1980s. As a reinsurer, we began reinsuring the product shortly thereafter. We have a rather good block of business in force now on the second-to-die product. Of course, this popularity is created here because of the needs that it solves, and it does it by insuring two lives for less than the cost of a single life policy. It solves the estate transfer problem. It also solves or provides replacement funds for charitable gift situations, and it's used from time to time for small business owner transfers.

Ms. Engler: Some popular riders on this product are the estate preservation rider (for which we have seen anywhere from three- to five-year terms), a joint first-to-die rider, and single life term riders. Some other riders that tend to be popular are an extended maturity option, a long-term-care benefit, and an accelerated benefit rider. The financial strength of the company is a key factor to the consumers when deciding where they want to place their dollars.

Mr. Bender: Another popular rider, at least one of the bells and whistles, so to speak, is the split-option rider. It hasn't been sold as much as your agency might lead you to believe. One of the probable reasons is because when an agent is presenting this rider to a married couple, who wants to talk about the possibility of a divorce, particularly if you have to pay for a split-option rider? When you do actually get an application with this rider on it, you should wonder whether there is any possibility of antiselection. But it does have some obvious uses.

The one thing that we have a question about is, how would you handle this rider, as an underwriter, if you were quite sure you had a situation with an impending divorce? Often, you'll find that out as a result of the underwriting process, either from an inspection report, or, many times, it's part of medical records. Sometimes one spouse or the other told the doctor that they're thinking about divorce. There

might be lengthy entries regarding depression, situational anxiety, or situational adjustments. Usually those are some of the factors that are making them consider that divorce. I saw a case where in both the husband's and the wife's medical records, there were notations that both were contemplating serving the other. The same doctor was writing it in each record because he was treating both of them.

Uninsurables. Obviously, you don't want to offer this rider to an uninsurable life coupled with another party. There have been a few occasions where we received phone calls from somebody in a political situation with a big producer breathing down their back, demanding the split-option rider, and asking for some way to talk to the reinsurer and find a way to price the product or the rider to bring that uninsurable with creative pricing into some form of a rateable range so that option could be included.

One of the ways to solve that, obviously, is to put some sort of limits on the split-option rider. Many pools that we're involved in have a table six limit to the split-option rider. And as I mentioned earlier, premium charges are the issue depending on how you design the product. Should you or should you not charge a premium for this rider? If you do not, it may be built in the base somewhere.

Another rider that creates interesting underwriting challenges is the increasing death benefit rider or inflation protection rider. One of the problems that we have seen many times is in how to administer that rider. That's probably a problem on the direct writing side, but we've also come to find it can be a significant problem on the reinsurance side. There have been some occasions where we've received phone calls from our administrative people maybe eight, ten years into the policy and, all of a sudden, here comes some death benefit on a policy that we weren't aware that we had.

The real problem though probably comes more into play when you have a jumbo situation on a facultative case that's being shopped around. Normally, when we make a facultative offer, we'll send a quote out indicating what the rating might be, or even standard for $5 million of fixed coverage. Often, we're not aware that an increasing death benefit rider has been requested. Sometimes that's probably just an oversight, and we can't tell from an application whether or not that rider is on. We don't really know a lot of the terminology or the names that are used for the various riders, particularly when we're dealing with anywhere from 100 to 150 different client companies.

Ms. Engler: I'm from the direct side, and we have found that to be true of our product as well. When we have a new product with several different riders on it,

we need to make sure that our administrative people make the reinsurers aware that there could be an increase in the death benefit in this case.

Mr. Bender: It's very difficult to find a home, particularly on an old jumbo facultative risk, ten years into the policy, particularly if it exceeds our retention limits and we have no other place to put it.

One life uninsurable. That seems to be an oxymoron. Who thought that you could insure an uninsurable life, but, once again, we're solving a market need here. Over the years, this concept has come up, and there are different definitions by different companies for the one life uninsurable. Usually, it's somewhere over table 16, or a life expectancy between two and five years. I've seen somewhere that life expectancy was six months or a year. You need to be aware of the definition.

Most reinsurance pools will place a limit on how high you can rate the healthy life when combined with an uninsurable. At one time, a few years ago, it was somewhere in the range of table four, and then it has crept up to, say, table six. A number of pools now have a table eight limit. There are a few companies that are writing uninsurable with no limit on the healthy life. Whether or not that is something that should be done is a gray area and is open to debate.

Ms. Engler: Our company just goes up to table four, and the other one can be an uninsurable. But a question that actuaries and all insurance companies are going to need to wrestle with in the very near future is the fact that there's a company in the U.S. that's now underwriting life insurance applicants who have tested positive for HIV infection. We are getting questions about whether we can take those individuals as uninsurables or not. So there is definitely some food for thought there to wrestle with.

Mr. Bender: I've done some different so-called cocktail approaches to HIV, as well as the possibility some day of some other types of treatments or even a vaccine. As we go further into the future, this is something that will come up again and something that we'll have to deal with.

And there are different rating approaches for putting together an uninsurable life, and this is certainly not in my area of expertise. Michael can address questions about that area. Often, a single life rate is used on the healthy life, and an administrative standpoint is probably easier to administer. Some companies are using the joint equal age approach. You make the uninsurable age 99 and apply the joint equal age rule. Or you can make the uninsurable table 40, 60, or some other variation and apply an exact-age calculation.

Now, I'd like to address some of the myths that seem to come from the field and some of the ones our plan underwriters ask us about. One of those myths is that you should be able to cut tables because it takes two deaths before a claim is paid. In reality, the products are very thinly priced, both by direct writing companies as well as the reinsurers. I think that's coming more into play as the pricing becomes more competitive. In those situations, it would be particularly dangerous to do it with highly rated or uninsurable situations.

Ms. Engler: One thing that I run into quite a bit happens when I'm working on a second-to-die product. Let's say we have underwritten it, and we get a table three on one, and a table eight on the other. The producer comes back and says, “Can't you get that table three down to standard?” Maybe you respond, “OK, I'll go standard and table eight.” Let’s say the producer comes back and says, “I want two individual policies.” It's hard to go back and convince producers, if they're going to go individual. I’m going to keep the individual person at a table three because it's not a second-to-die product anymore.

That's another reason why you shouldn't cut tables on this product. Often the producers may change their mind and go from a second-to-die product to individual products. The producer has already gone out and told his clients that you are a standard, whereas you, as an underwriter, started with a table three and then you backed down because you were working with a second-to-die product. So that's another reason not to cut tables on this product.

Mr. Bender: Another myth that we hear is that it takes a specialized underwriting knowledge to underwrite this product. That's not necessarily so. But you really need to have an underwriter who is experienced in the large case market, and somewhat experienced underwriting the elderly risk. It's not a product that you want the junior underwriters to work with. Given that experience, it's probably not as big a problem as some people would like you to believe.

Ms. Engler: At your companies, do you have underwriters that work specifically on this market? You do have. Just one. I think any underwriter probably works on this product or works in conjunction with someone else.

Michael made reference to this. How many of you in your company actively work with your underwriters when you're working on a new product or pricing a product? One thing that all of us have heard over and over from the Home Office Life Underwriters Association (HOLUA) and the SOA is the emphasis on getting those two functions more and more together, which I think is really important.

Some companies, when they're working on this product, will cut the face amount in half and then order requirements based on that amount rather than a whole face amount. Each company has to price it accordingly, depending on how you order requirements.

Another challenge with this product is that it is expensive to underwrite because it does have higher face amounts. There are more requirements because of the larger amounts, and more financial underwriting. Often, it's easier to justify. These people have a very large net worth and have ample records in order for you to justify that amount. You have a wealthier clientele and, often, they make more trips to the doctor.

And I've even seen the opposite where clients make fewer trips to the doctor. I think maybe it's more prevalent in the Midwest where we still have an older population who either doesn't trust doctors or doesn't want to spend the money or doesn't have the money to go to doctors. So what if they have some chest pain or a stomachache? They just aren't going to go check it out. As underwriters, we need to read between the lines on some of those cases.

I think we all see more foreign nationals or individuals who have immigrated to the U.S. who maybe don't have many records in the U.S. You need to underwrite that case based on the information that you can get.

Some other challenges that I think lie in the inspection reports that we use on this block of business. Our company doesn't ask different questions of the older market, but maybe we should. Maybe we should be asking more questions pertaining to activities of daily living or trying to detect whether there is some dementia or other disabilities that may be potential problems.

Another challenge we have is poor placement ratios. There's a lot of heavy shopping done in this market due to health history because agents are playing the ratings game. They're trying to get the lowest rate that they can to sell to their client, or they may be trying to spread the risk between several companies, especially if it's a jumbo case. Of course, if they have an uninsurable life, there are really high ratings due to age and health. They will shop around if they are so inclined.

With our company, what I found was the number of closed cases that we had in our block of survivorship cases was about 22%. Those were just incomplete or cases that were not placed. The number of active cases made up 70% of that block. The surrender and lapsed ratio was only 3.6%. So once it's on the books, it tends to stay there, which I think is really important. You just have to make that little caveat

here. I couldn't get an accurate count of all the trial applications, so the number of closed cases could be more than that.

On the reinsurance side, for the past two years, we saw that 40% of all of our cases were survivorship products, but only 6.8% were placed. So there's a lot of shopping going on in that block.

Mr. Bender: Actually, that's a better placement rate than we have as a direct line, first line reinsurer. I don't have an exact figure for it, but it's somewhere more in the range of 3–4%. One of the reasons for that is because of all of the shopping that goes on in our marketplace as a reinsurer. They have an agent who has opted to five different companies including Karen’s. Then another agent could be shopping at four or five different companies. That's created a jumbo risk, which also affects the capacity issue. But then companies like Karen’s turn around and come to the reinsurance market and shop four or five reinsurers. So from our end, and from the retro end, the placement ratios for this product are not at all good. But as she did say, once you put it in force, persistency is better.

Ms. Engler: Another challenge that we have with this block is the much higher average age of the applicants. You have two lives. You're underwriting more health history because it is from two different people. There are more requirements, and there are bigger files. You start bringing in a yardstick and measuring the depth of the file. Also, because you're working on two lives, something that we need to keep in mind is trying to cut down the cost because of the poor placement ratio.

So on a known uninsurable, we would tell the producer that he doesn’t even need to order a requirement on the individual, other than the medical records, and we would do an inspection report to justify the financial amount. For the rest of the requirements, we would just waive those because you really don't need them.

We encourage trial applications. We could have the producer just send in a trial application. We would just get the medical records first, and then go back to them and say that there's a tentative offer of such and such. They can determine whether they think they can place the case or not, and then they can order the appropriate requirements.

Some other challenges we have are the aviation risk itself. Do you want to put a rating on these cases or do you use an aviation exclusion rider? How is this going to affect the combination with uninsurables?

Mr. Bender: Whether you should use an aviation exclusion is a very important consideration. I think that's an area that's open for debate. I know there are few

companies that try to do it, but if you have to refund premiums on a policy because of an aviation rider or exclusion rider and the pilot died first and you had to refund those premiums, you have another life that is not covered. So what do you do for that? What if that other life all of a sudden became uninsurable or rateable? I would say that's an area of concern, and it's probably an interesting topic for discussion.

Ms. Engler: It really depends on what you put in your policy language. It needs to really be watched because you'll need a different exclusion rider for your second-to-die policies versus your single-life policies. Of course, if there's a rate reduction down the road, how are you going to handle those situations? We feel that you're going to have to reunderwrite both lives again because the health history could have changed. So those are all things that you need to consider in the area of aviation.

Mr. Bender: The big challenge that's coming up more and more is underwriting the elderly risk. And we're not going to spend much time on that topic because there are other sessions both at this meeting and at the HOLUA meeting discussing that very topic. But we're going to mention a few things that are a little different about underwriting the elderly risk as compared to the general population risk.

Pricing. The contagion factors on the broken hearts syndrome are things to take into consideration. Actually, I can speak to the broken hearts syndrome from a personal standpoint. Very recently, in the past year, my mother-in-law died of cancer. She was about 77. Her very healthy husband was 81 at the time and, frankly, he had a very hard time dealing with her death, which is what you read about all the time. How should both underwriters and actuaries handle this from a pricing standpoint? Do we price for it? I would say very much, yes.

To the extent that you can, you also need to look at the couple’s lifestyle from an underwriting perspective. My in-laws were married for over 60 years, and they did everything together from the time she was a cheerleader in college for his baseball team all the way through married life raising the kids and then into retirement. They got to the point where they didn't really have any separate interests. Sometimes you can, as an underwriter, pick up a little bit on some of that. But, then again, how do you handle it?

Within nine months after my mother-in-law dying, he, because of being lost without her, was gone. He was a perfectly healthy individual. This seems to happen more with the male population, particularly when they get in their 80s.

Ms. Engler: Another aspect is the contagion factors, of which the broken heart syndrome is an aspect. The contagion factor is defined as the chance that the circumstances of one insured can, in some way, impact and enhance the chances of death of the other insured. It may include impaired health, avocations, aviation, lifestyle, or anything else that might impact the health and safety of the other insured.

There are such things as coronary artery disease, malignant hypertension, blackouts, and seizures. All such impairments could place both insureds at risk for sudden and otherwise unexpected death, particularly when the impaired person is, for instance, operating an automobile. It's also important to point out that the death of the second insured may be simultaneous with, or following and partially as a result of, the death of the other insured.

Some other medical contagion may put the other insured at increased risk, such as psychiatric disorders and depression. We see a lot of depression in the elderly market for the same reasons that Jerry was talking about—the loss of a loved one, or the loss of another family member, retirement, change in the health of a daughter or grandchildren. Other medical contagion could be polypharmacy, negative interactions and reactions, alcoholism or alcohol and drug abuse, or any lifestyle factors.

In the past decade, according to the National Institute on Aging, the number of people killed in auto accidents actually fell 8.4% The auto accident-related deaths of men and women over age 65 rose 43%. Most of that was not due to high speeds, but because of low speeds, missed traffic signals, or wrong turns. Add to this effect that some 40% of elderly drivers have some degree of dementia. The largest percentage of domestic fires occurs in the older age market. Of course, there is the broken heart syndrome that Jerry just talked about. I found one statement that said that actuaries should add one to four cents per thousand for contagion factors.

Mr. Bender: Karen asked what type of policy issue ages are you using, and how high do you underwrite? We're seeing in many cases now where the policy issue ages on this product are going up to age 90. We're receiving requests to not only price for standard, but substandard cases, even up to age 90. That is probably something that, again, we need to deal with because we do have to build a statistical base for adequate pricing in the future. I think we need to proceed cautiously there and use certain types of limits with certain ages. Maybe we should use table four up to 80 or 85. Above that, as an underwriter, I would recommend you could think on a standard basis. However, as we go through the ages, we all know that competitive pressures are going to arise. By then, we'll have a little bit better or more credible experience.

There are different definitions of the elderly. The young-old category was ages 65–74 a few years ago when we were talking about the elderly risk. Now, 65-74 doesn't seem quite as old as I used to think it was. When my age group was just getting out of college back in the 1960s, we didn't trust anybody over 30. That seems quite young now. It's all in a matter of how you view things. Obviously, old-old is age 85 and older. A very large group of the population is going to achieve those ages as we get further into the 21st century.

I just want to mention a little bit about the different marketplaces for the elderly life market. The last expense is the burial market. The burial market is obviously not a place for this product. There's a certain amount of second-to-die policies sold in the middle class marketplace. Smaller amounts are more often sold at the younger ages. Of course, the real market now, as well as in the future, is the affluent elderly, those who have large estate tax burdens, business owner transfers for replacement of funds, and charitable gifting.

Ms. Engler: Another area we see sometimes would be the national foreign market for immigrants or foreign nationals in the U.S. We need to be able to get verifiable financial records, and then we do need to know the tax laws of that other country. We need to do a little research if we get cases like that.

Mr. Bender: I said that we wouldn't spend much time discussing underwriting and the elderly, but there are some things that are a little different. One of the things we're really looking at on the attending physician's statements is whether there was disability that was associated with morbidity at the younger ages. Many times it then becomes associated with earlier mortality at the older ages.

Elderly characteristics. This is an area that somewhat goes hand and hand with activities of daily living. There are different characteristics that we, as underwriters, can pick up on to determine the quality of the case. These are things such as the cognitive impairment, balancing and gait abnormalities, and frequent walking for exercise. Many times these people never come out of their house. Maybe we, as baby boomers, are developing that habit to become couch potatoes to a certain extent.

Karen mentioned depression earlier, and that as well as suicide are big factors. There's upper and lower extremity disabilities, moderate-to-severe vision loss, which, unfortunately, I'm already experiencing. Many times the medications include sedatives. If you have three or four of these characteristics, you wouldn't rate them in and of themselves. But if you combined three or four, you might want to add a table or two in the rating as an underwriter. If you have five or six

characteristics, and if the client is over age 75, you might not want to offer coverage to that person.

Ms. Engler: I just wanted to give you a few more statistics I was able to find from a 1994 LIMRA survey. As far as common disaster joint deaths, when we were talking about contagion factors, they actually were quite rare when they did their survey. There was just one company that reported two such deaths in 1992, and another company reported just one joint death in 1993. We've only had first deaths. We haven't had any second deaths yet, and we've had this product available for six years.

The current mortality data suggests that over 50% of survivorship claims are expected when the younger insureds reach their 90s; up to 80% are expected to be paid after the younger insured is 85. Overall, for most companies that we have spoken to, the mortality has been very good. But I don't think we're really going to know ultimate mortality until we get more experience data.

Mr. Bender: Actually, we have experienced some first and second deaths. We've had this block for a while now and we have experienced about a dozen second deaths. We currently have about 70 first deaths that have been recorded, but many times you don't necessarily know about that first death because all of them aren't reported the way they should be.

Financial underwriting. Karen mentioned earlier, that many times financial underwriting is less of a consideration if the insurance is sold properly. It's quite apparent, and it is a fairly easy calculation to figure out somebody's estate need if you have the proper documentation. It's also fairly easy to quantify taxable gift situations. It's not an income replacement product, and that seems something that you wouldn't think needed to be shared, but I've had a number of occasions where people have tried to justify that—using that product to justify income replacement needs.

Table 1 shows a sample of an estate growth formula, and there are many different formulas that are used. Using one gives you kind of a ballpark idea of where to look or what to look for from a financial underwriting perspective. This one is middle of the road or conservative and uses a 6% factor for the interest rate for maybe a maximum of 15 years. And there are different other rules of the thumb, and I'm not going to go into them in any great degree.

TABLE 1
SAMPLE ESTATE GROWTH FORMULA

Age	Projection
to 54	6% for 15 years
55–66	6% for 10 years
67–70	6% for 5 years
71–up	6% for 2 years

Note-Multiply the projected value of the estate by 55% to determine the approximate estate tax. Estate growth may not be justified in all situations.

This one does not follow the tax guidelines. It's just a rule of the thumb that will give you a close approximation of where one might want to be to figure the amount of insurance that would be reasonably acceptable to solve the need. It actually comes out a little bit on the high side, which one would think would make the agent happy.

But one of the challenges that we all find, as underwriters, is that the agents, no matter what, are going to complain either that the projection is not long enough, or that the growth factor is too conservative. If you would use an aggressive growth factor and project too many years in the future, at an early age, you will have a face amount that's just unreasonable according to the need.

Ms. Engler: We have several agents who like to use what I call creative justification for the face amount they're applying for. Often, we need to question them and just find out what their train of thought was on this case, what software package they may have used, and what their logic was. Often, they want a certain amount. So then there's a training issue usually at hand where they must talk to the producer about justifying the face amount.

Mr. Bender: Karen had mentioned earlier a rate reduction request primarily during her discussion on aviation. In general, we feel that because you sold a joint product and calculated a joint premium, you should underwrite both lives. You did joint underwriting to begin with, and the reason, of course, is that if, for example, you only underwrote the unhealthy life for a rate reduction and then granted that reduction, where are you at if that healthy life had become uninsurable or highly rated in the interim? You'd be dangerously underpriced.

From our perspective, in general, and with the support of our pricing people, we feel that pricing levels are generally fine with the following assumptions or caveats. Use prudent older age underwriting and proper classification of those uninsurables

and put limits on the healthy life. Of course, we don't recommend table cutting at all.

You have limits on your policy split options, and there is some pricing for the broken heart syndrome, or contagion factor, although the simultaneous death risk doesn't seem to be as much of a factor as originally thought. If you cover contagion and broken heart syndrome, there's probably enough in there to also cover simultaneous death.

Mr. Taht: I'm going to take some of Jerry's and Karen's comments and try and highlight their impact on pricing. Let's discuss pricing problems, although it's probably more appropriate to say pricing challenges. Many of the challenges that underwriters see, when they're looking at these cases on a day-to-day basis, have a direct correlation to challenges we face when we price these products.

So where are we today with mortality? There have been many more first deaths than second deaths. And I think it's fair to say that insurers are cautiously optimistic when it comes to experience on this block of business. I think some specific comments about the population should be made. A substantial proportion is rated, a much higher proportion than would be found in the individual lines. There are more females in the population of the second-to-die line than there are in the individual life line. The average issue age of these policies is much higher than what we see in individual life insurance.

So what does that mean when it comes to pricing? I think it's still fair to say that experience supports the current pricing levels. I think there are some caveats, as Jerry mentioned just now, especially with regard to underwriting. I think we're really looking at it through older age underwriting and proper classification of uninsurables.

I've had a few conversations at this meeting about the uninsurable risk. I guess, as an industry, we've been moving towards preferred and super preferred. A few people have asked whether we can extend it the other way. Can we extend the uninsurable bubble?

I think this is one product where there's definitely a need to do this, a desire on the part of our agents, and I think there's an opportunity. Maybe if we spend some time working with underwriters and medical directors, we can find a way to offer these opportunities.

A couple of other factors have a direct impact on pricing, but an indirect impact on mortality. Who is this product being sold to? Why are they buying it? I think at the

older ages, 70 and above, it is generally purchased as a substitute for term insurance, whereas in the 45–60 year old range, it's purchased more as an accumulation-type product. That's going to impact the pattern of the net amount at risk as we go into the future.

Persistency has been very good except in the lower face amounts and with the lower socioeconomic classes. However, I don't think this product is particularly well-suited to that market. It shouldn't come as a surprise that the lapse rates are lower than individual life insurance. People purchasing this insurance have estate planning in mind as a specific purpose for buying it. The reason for purchasing insurance is not going to go away. In addition, because many of these people are older, and one of the insured lives might have an impairment, it might not be very easy to get insurance elsewhere after the sale has been made. So the good persistency should not be a surprise. When it comes to pricing, experience says you have good persistency. It should be reflected in pricing. We do have the small asterisks for the low face amounts and the lower end markets, but that really is not generally the target market for this product.

Expenses. This is still a quite expensive product to underwrite. Why is it expensive? There are two lives, higher face amounts, and older ages, which translates into high underwriting costs. The poor placement ratios that you see in these products will tend to inflate those costs even more.

What to do? Properly reflect the higher underwriting cost in pricing. When looking at these costs, you will notice that it's not just the tests that are ordered, it's also the time spent underwriting these cases. You do not want to ignore the poor placement ratios. What's most important is you must work with your underwriters to get a better understanding of the costs that they're incurring when they underwrite these cases. Learn why the placement ratios are poor. We know that these cases are being shopped, but how does it compare against the experience on your individual life policy?

I'm just going to wrap up this session with a few actuary/underwriter conversations. The actuary: "Pricing margins are slim because of competition, but this is fine because the underwriting rules are sound." The underwriter: "Profit margins must be large because there are premiums being charged for two lives. Two deaths must occur before benefits become due, so it's OK to cut the tables to get the case." Now, it might not be the underwriter saying it, but your underwriters are hearing it from the agents any time there's a big case the agent is trying to place.

Result. We talked about slim margins. If we start cutting tables to place the cases, those slim margins will be eliminated by extra mortality.

Solution. Do not cut tables. There are probably not many actuaries who are on the front lines cutting tables, but we can work with the underwriters to help them understand the margins in these products and give them a bit of ammunition to deal with a situation in which they don't want to cut the table.

The actuary and the underwriter: "We only need to worry about the healthy life in underwriting and pricing." If you have a split-option rider, that's not going to suffice. What about the broken heart syndrome?

The solution is you have to look at limiting the definition of uninsurable, make healthy life limits stricter, and definitely place limits on the split-option rider.

Finally, the underwriter. I am a specialist in substandard and older applicants. So for certain impairments, I can use my skills to achieve better mortality and cut tables. I think it's also fair to say that, as I mentioned before, the population who's purchasing this type of insurance is different from the regular individual life insurance population. There are more females at older ages than what you would usually see, and there are more rated cases.

If you do not have, or if your underwriters do not have, expertise in that area, or you don't have the mortality experience in that area, it is appropriate to look elsewhere. There is expertise available from your reinsurers. Other underwriters might have experience in underwriting these cases. You can always turn to your friendly consultant. But if you don't draw on that experience, mortality experience might not be achieved.

I think to wrap up, this business has some different characteristics, both from a pricing standpoint and an underwriting standpoint. It's important to reflect those characteristics in both the underwriting process and the pricing process.

Mr. James W. Pilgrim: How frequently do you see companies using generation skipping in using this product? I also have a question for Mike pertaining to figuring out the appropriate cost of insurance rates when you have one insured who has an extra hazard that's really typified by a flat extra. You're spreading that over the last survivor's lifetime. Is there a possibility that you can be post-funding some of that extra mortality? What do you do to control that?

Mr. Bender: Jim, regarding the generation skipping. From our perspective, as a reinsurer, we don't see it very much. I think there are some situations where it's used. Many times though we don't really know what is really being set up. Many times we'll see the application and the trust will not have been set up, so we really don't have full details on the beneficiary, at least during the initial underwriting

process. We look at the overall case and the overall financial need, and most of the time, it's justified from that standpoint.

Ms. Engler: I have rarely seen it, so I guess we really haven't had much experience in that area. There's so much background work that needs to be done by the producer, who needs to work with so many different consultants that, often, I don't think producers want to get involved anymore.

From the Floor: I haven't specifically addressed that point in pricing before, but I think it's an excellent point. It's something to look at when you guys are assessing extras. Do you make any allowance for it? Have you seen that?

Mr. Bender: There are some situations where we work with our pricing people to come up with a determination, but it doesn't happen that frequently.