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Session 50 PD
The Personal Actuary

Track: Actuary of the Future, Smaller Consulting Firm, Health

Moderator: John M. Bragg

Panelists: John M. Bragg
Mitchell I. Serota
Teresa Russ Winer

Summary: The eternal question, "What does an actuary do?" is about to have an entirely new answer. At this session, participants are introduced to the burgeoning field of the "Personal Actuary." Specifically, the session presents what a personal actuary does that is different from traditional consulting; what skills actuaries presently have that are relevant; what skills need to be enhanced; potential clients of a personal actuary and how an aspiring personal actuary can secure a client base; and a potential financial model for a practicing personal actuary.

A panel of practicing personal actuaries share case studies from their work. Members of the Task Force on the Personal Actuary report on the initiatives of that group, including the roles that the Society of Actuaries and its members can take in supporting the endeavors of personal actuaries. Participants benefit by hearing that the profession is not static and that they actively can take part in shaping the role that the Society of Actuaries plays in support of the endeavors of personal actuaries.

MR. JOHN M. BRAGG: There is a new book out called, "The Tipping Point: How Little Things Can Make a Big Difference." It's a good book. I have read it. I believe that the personal actuary scene is at the tipping point after several years of effort starting in 1991. There was a major paper about it in *Contingencies Magazine* in March 2000. Even in the actuarial profession, we suddenly are discovering the existence of this career path. We're excited about future prospects.

Teresa Winer and Mitchell Serota will join me on the panel today. Ms. Winer is on the board of the SOA and is the chairperson of the Task Force on the Personal Actuary, which is now a part of The Actuary of the Future Section. Teresa is president of Chastain Financial. Mr. Serota is president of Mitchell I. Serota & Associates, Inc. He has a Ph.D. from the University of Chicago and holds a bachelor's degree in mathematics from MIT.

Teresa will deal with questions regarding what is the personal actuary profession. Mitch will give examples from his own experience as a personal actuary. I will end by discussing what to do next to move forward.

MS. TERESA RUSS WINER: Personal actuaries work with individuals. There always has been this problem with people not knowing what actuaries can do or what they might be able to do, or not understanding anything at all about the profession.

The definition of a personal actuary is very short: an actuary who performs actuarial services for specific individuals. You can work for another professional in supporting this individual. You may or may not work directly with the public. You could work with lawyers, financial planners and all kinds of people out there serving the public in many ways.

The interesting part about personal actuarial service is that it is so broad. You can have so many specialties. You can help people with their life insurance, health insurance and auto insurance. You can help them with personal evaluations about their life situations. They may have multiple impairments or illnesses, and they want to know how that affects their life expectancy or the possibility of going into a nursing home. Risk management helps them plan for contingencies in their own lives. You can help them with matters involving claims and entitlements if they are having trouble with a claim and don't understand their policy. Often, actuaries have written in the policy, so we know a lot about it. You can help them with investments, taxes and life settlements.

Personal evaluations can include many things. You've all heard of life expectancy. The new concept is health expectancy, for which you divide out the number of years that a person should be healthy. You can figure whether or not a person might need a nursing home or assisted living. You can figure the components of someone's life span. This is where the actuarial practice may have applications for long-term-care insurance. You can figure the number of years that a person might be in a nursing home.

As far as retirement and pension evaluation, a personal actuary can tell people to take a lump sum or help make other decisions about retirement, such as early retirement and insurance review. There actually are products out there that help you do this.

This is a typical example of health expectancy. A female nonsmoker, age 45, has a

50/50 expectation to live to about 90. You could divide that up and include five years of skilled nursing, 5.3 years of assisted living and 33 more healthy years. That's a lot of healthy years. Many people are surprised by how long they actually have.

Regarding personal risk management, I talked about pension options, including deciding what to do in divorce. Many people don't know how to evaluate their pensions. Lawyers will divide up the life expectancy numbers based on some old tables. Mr. Bragg has come up with tools to compare different life insurance policies; it compares them as apples to apples. Any actuary could come up with this. You just input some reasonable mortality-and-expense numbers. The tool tries to match varying premiums and give a rating system. It's so confusing that it's almost impossible to rate them. Actuaries can break it down. Personal risk management includes health insurance and long-term-care needs, such as assisted living contract advice. There was a recent article in *The Wall Street Journal* about a retirement-probability analyzer. This is something that has been used in the individual market.

In the investment advisory world, people are planning out their retirement and making sure that they don't outlive their money. Much of where they're putting their money could depend on their life expectancy. They could be ill. That might affect their risk profile. Actuaries have a lot to add in the whole investment arena for individuals, including how to pay their assets and so on. You can get scenario testing. Of course, there's a lot of life settlement business out there.

People are investing in secondary insurance by buying up a bunch of policies and hoping that they're going to pay a death claim. They end up not paying any claims for a while, and the investor has been in trouble. He or she has invested in a big block of policies, and some of the people aren't dying. What do the investors do? They are paying all of these premiums and need to get a loan. An actuary could decide which ones could "live forever" and tell them to stop paying the premiums. It reduces losses.

I have an actual mailing from a company that has industry statistics for life settlements. It says that in 2004, more than $6 billion in life insurance will be sold on the secondary market. I don't know from where they're getting that number. In 2002, life settlement cash payouts were nearly four times the cash surrender value of the policy. It's interesting.

I talked about life evaluation. As an example, somebody might be classified as a viatical. He has less than two years to live, but he doesn't have a terminal disease. He has a lot of multiple illnesses. We can take mortality ratings as though you would underwrite a policy based on a person's health at the time. You'd have credits and debits. However, you would have a factor for your mortality and make assumptions. We can predict this person's life expectancy.

For this case, the mortality multiple was about 384 percent, and he had 2.1 years. In the second year, the probability hit 50 percent. You can show people probabilities by each year, rather than just giving them one number. The general public used to think in terms of living until age 87 or 90, but they don't understand that each year there's a probability they'll get hit by a bus or something else might happen. It's good to remind people of this.

Say a life settlement investor has 10 policies. They're not paying off. We can break down each one of these cases to check out their life spans and show him or her that by the third year, based on a certain block of business, he or she might have one death. That was shocking, because the investor was told that all of these people were going to die within two years. According to the life expectancy given when he bought all of these policies, he did not have a clue.

Actuaries could help with claims disputes. There is an actuary working with Social Security and pension benefits who sends out information offering to help look for mistakes that have been made in pension calculations, even in Social Security calculations. These things happen.

Our task force is having problems because there's no identification mechanism in our directory system to indicate if an actuary is doing any kind of personalized work. We have no idea which people are doing this. We just know of a few that came to us because of the task force. We're trying to collect names. We suspect that there may be larger numbers of personal actuaries out there.

We run into many incognito personal actuaries. They're doing financial planning. They might think that they are not in the profession anymore, but they are using actuarial skills. There are a lot of people that are personal actuaries that don't even know that they're personal actuaries. Personal actuaries can incorporate any kind of taxes while they are doing this. Not that actuaries want to just do taxes, but it becomes a factor when you're looking at an investment portfolio.
The Actuary of the Future Task Force is our working group. We're not in the Finance Practice Area. We have a Web page on soa.org. We've been generating different ideas. For example, right now there are state laws that exempt certain professionals from taking SEC exams to become financial advisors, including the chartered financial consultant and the chartered financial analyst. Actuaries are left out. We are looking into why. Should actuaries be included? If they become financial advisors, do they have to take more tests?

You can find previous studies in the SOA Library. We have some major initiatives. We did a personal section for the guidebook. We revised it and are trying to do it on the Web site. We are trying to collect names for this. We did market research. We pulled together lawyers, personal bankers, financial planners, etc. These are people whom actuaries could serve.

We did life settlement research. I went to a conference and talked to life settlement

professionals. They were very receptive to actuaries getting involved and helping to professionalize their industry. They feel as though they've gotten a bad reputation. Actuaries could do a lot to help investors make more sense of that whole industry. These changes are going on, and actuaries were not involved at all until very recently. We're trying to revise the definition of who we are and increase our visibility. We're looking for more people that are interested in the personal actuary.

A lot of actuaries wait until they're retired to become interested in this. They figure that they'll do it on the side. They could start earlier. It is a very interesting profession, and they could be a part of how the future plays out if they get on the task force.

I just checked out a flier from a group of consulting actuaries that have a special liability insurance program. Their flier says, "Professional liability insurance protection always has been difficult to obtain at reasonable rates." There is a big issue about the cost of liability insurance and how to help actuaries work with the public to cut their exposures. There are some issues, though. They can't share or give legal advice to people, as far as different contracts that you must divide up and decide exposures when working with a client. They need more time to work out those issues and improve that.

Affordability is another issue. If clients are involved with a legal case, they expect to pay their lawyers hourly rates. But in the typical financial planning situation, some people aren't used to paying fees for services. That could be an issue for the personal actuary profession.

Another challenge is networking. We don't really know who are the personal actuaries. We don't have a way to identify them. We're trying to get that out and into the new directory. More promotional tools are needed.

MR. MITCHELL I. SEROTA: I want to get you into the mode of what a personal actuary does. How does one become a personal actuary? I stumbled into it. I don't consider the main source of income in my company to be that of personal actuarial work. It's a supplemental business for me.

Once it gets to the point where I'm doing most of my work with individuals rather than with corporations, then the concept of the personal actuary will have taken off. I'll look at future trends and what might force a number of people in this room to become personal actuaries, whether they want to or not.

I'm a founding member of the Smaller Consulting Firm Section. That's how I got pulled into the task force on the personal actuary. The SOA has an incredible amount of resources available for an incredible array of things that you might want to do. But there's absolutely no publicity about these things. It just doesn't exist. You have to find out about it. Being the vice chairman of the Smaller Consulting Firm Section, I was thrown into a room like this with other presidents and vice

presidents of other sections. I was sitting at a table with the former president of the Actuary of the Future Section, and I didn't even know what the Actuary of the Future Section was. He was telling me about this task force and I thought, "I kind of do that work on the side." One thing led to another, so I joined the task force.

At the New York meeting last year, I went to a presentation that was being sponsored by the Actuary of the Future and/or the Task Force of the Personal Actuary. It was a presentation about some software that I'll discuss shortly. There's absolutely no connection whatsoever between the Task Force of the Personal Actuary or the Actuary of the Future and the software that had just been developed, which enhances the role of the personal actuary tremendously. All of these things are happening at the SOA and nobody tells anybody else about it. In doing a little research, you'd be amazed at the things that pop out at you. I want to hone in on the resources available to our membership and how you can expand your own horizons.

There are pension-based personal actuaries, as opposed to insurance-based personal actuaries. One of the things about retirement planning is that you're dealing with chief financial officers (CFOs) and presidents of corporations. You establish a trust and bond with them. They sometimes come to you with personal issues. You're working on a retirement plan, and they want to know what they need to retire, anyway. What sort of income bases? What sort of savings must they accumulate to be able to retire?

I sometimes get pulled into estate planning because there are actuarial issues for estate-planning attorneys. About a decade ago, I found out that the IRS uses a very specific mortality table, which is not SOA-based or ERISA-based. It's their own little table. You can't find it on the SOA Web site for a good reason; it's used strictly for estate-planning purposes for the IRS and nothing else. That's the only place that you can find it. That brings you into how we relate to individuals, as opposed to large groups.

One of the principal ways that a pension actuary can be drawn into the financial needs of an individual is by evaluating the defined benefit plan of divorcing spouses. If you take it to the next step and develop a relationship with the client, as opposed to with the attorney, you'll find that the clients have their own financial needs and concerns and wants. I had a divorced client who was totally at sea with what she was going to do with her money. Was the income going to come through to her as was promised? I follow up with her on an annual basis, just to make certain that her revenue continues.

The first issue in planning for retirement is, how much money do you need to be able to retire? You need a stream of income to retire on, not a lump sum. Everybody is keyed into the notion of retiring with a pot of gold at the end of their working "rainbow." But what do you do with the money? How are you going to spend it? Do you have enough? Do you have too much? Is something going to be

left over for the estate? Are you going to buy a boat or a car with it?

There was a recent article in *The Wall Street Journal* about how a company terminated its plan and gave everybody lump sums. The auto dealer in town suddenly made a bundle of money, because he was selling cars to everybody who worked at that plant. No one had anything left to retire on, but they had beautiful cars. That's nice, but it doesn't make a lot of sense.

We have the ability, especially if we're in the pension field, to help people deal with their lump sums or suggest not having a lump sum. Maybe you want to keep it as a deferred annuity. As our client ages, we can set up a payment stream. Are you taking out too little, because you're afraid that you're going to live too long and you understand the notion that longevity is now a factor in how retirement works? People are living longer lives. Or are you going to go to the route of "whatever happens, happens"? It's the concept of self-annuitization. Instead of buying an annuity from an insurance firm, you're making your own annuity. You have complete control over how much money you're going to be spending every year. Is that good or is that bad?

In the course of retirement, how is our client doing, who has now aged and hasn't been saving well? One of the concepts that I learned by being part of a task force is the health expectancy notion that you can have this stream of income that's helping you through your retirement years, but toward the end of your retirement years, you're going to need more, because you have excessive expenditures for which you must plan, unless you're going to keel over from a massive heart attack and die peacefully. What happens if that massive heart attack isn't quite as massive as you had hoped, and you're lingering on in a skilled-nursing facility or worse? That's going to drain all of the money that you've been saving up for yourself and your family, and it's going to first suck down your retirement pot of gold. These are factors that we have to help individuals understand. The 10 of us on the task force are trying to talk to 250 million Americans. It's not an easy task, so that's why we're inviting you all to help us out.

Where do we find clientele? As I said earlier, current clients, CFOs, presidents of corporations and high executives have come to me and asked for help in planning. I'm not a financial planner. But they realized something that I didn't realize. I have the whole skill set. I know the economics, I know the financials and I know about mortality better than a financial planner does, because he's looking at a table produced by some run-of-the-mill insurance company. They don't understand the interactions between an interest rate and the mortality tables.
How many times have I gotten calls from attorneys saying, "I have a client who's 58. What's his life expectancy?" Who cares? Who cares what his life expectancy is? What kind of interest rate are you going to be using, along with what kind of mortality table, to come up with some sort of value? We learned that an annuity certain for the life expectancy is not the same as an annuity for the life of the individual. How do you explain that to an attorney? Some attorneys get it, because

I explain to them very clearly that one is saying that this is going to go on for as long as the person lives, as opposed to the annuity certain, which means that you're going to live until your life expectancy and die the next day. It's 100 percent certain that you're going to live to 83.7, but you will not make it to 83.8. Trying to explain this concept is an uphill battle, but it's a battle that has to be fought.

Family and friends are another source of clientele. But family and friends are kind of a dicey issue, because you have to get into the inner workings of people's finances and their lifestyles to be able to help them. It's always easier to help somebody that you don't know. Just before coming here, a very close friend of mine said, "I'm thinking of retiring within the next 10 years. I want you to help me out, and I want to pay you for it." I said, "You must understand that for me to help you, I'm going to have to dig into your finances and your lifestyle, how you and your wife are living, what you're going to do with your two daughters and what kind of estate you want to plan for them. It's going to be a very personal, in-depth study, and I'm going to learn more about you than you might want me to know." If he accepts that, we're going to be a little more friendly than we are now. It's a very intimate relationship, which, I think, is a lot easier to do with a complete stranger than with someone you know. It's better to have a referral from a friend, to help somebody who's a complete stranger, than get to know this family on such an intimate basis, which gets down to the trust thing. How many people have come to you and said, "You're an actuary. How long am I going to live?" People come to us. They know that we have the skill set. It's up to us to channel that skill set into something that can serve the public.

How are we going to serve 250 million Americans? Are we going to look at the very wealthy, because they're the ones who can pay for our services, since we're charging exorbitant rates in the first place? Can we bring to bear a personal actuarial technique to a mass audience without resorting to becoming financial planners? Once you're a financial planner, everybody is the same. The whole idea of a personal actuary is that we are an actuary for an individual. We are going to help people through their retirement processes.

Where do we find clientele? Lawyers are a terrific source for clientele, especially in the case of divorce. Financial planners come to us. I have a client who is not exactly a financial planner, but he is an investment advisor who understands that the tables that he has been provided by his brokerage firm are kind of hit and miss, and they really don't tell him what's going on. Accountants sometimes realize that we have skill sets that they don't have.
Of course, there are other sources of referrals. It's incumbent upon us, especially an introverted group like actuaries, to help each other. You have to take the first step in getting the referral process going, because it's not a natural instinct for us. We have to expand our ability to go out and meet people.

There are resources available from the SOA. In particular, there are two software modules that have been developed by the SOA, completely apart from each other.

One group didn't know that the other existed (which is squandering our resources), but both of them are excellent and both do slightly different things in attacking the problem of retirement.

The retirement probability analyzer by Moshe Milevsky and Anna Abaimova was mentioned in *The Wall Street Journal* article that Ms. Winer mentioned. This program is available on the SOA Web site. They set out to do a deterministic forecast of the probability that you will run out of money before running out of life. They do it in an actuarial kind of way, talking about ruin theory. It's dark. You can relate to it, and if your client has a sense of humor, maybe he or she can relate to it, too.

The retirement probability analyzer sets up five different screens and asks you how much money you have to start, what your spending strategies are going to be and into what sort of assets you have divided your money. Although they have five sets of assets, one of them is not foreign investments. But you can take out the real state and pretend that it's foreign investments. The program has to examine the likely expected return on investment from each of these various pockets of assets. The fun part is finding your standard deviation. You can use their defaults, or you can put in your own return on investment and your own standard deviation for return on equities, return on bonds, etc. Then they allow you to change the expectations five years hence. The program is solving a bunch of differential equations using an iterative method. It takes about 90 seconds, each time you go through the process.

The second software was written by William Leslie. His study was funded by the Actuarial Education and Research Fund. He was not aware of the Milevsky and Abaimova software, even though it had been published. The people who were reviewing his work were all life insurance actuaries and not related to pension beyond the notion of annuities. It was a strange disconnect. He was working on a project for the personal actuary and had no clue whatsoever that the task force existed.

His model is not yet available to the general public or even to the general actuary public. I had to request access to it so that I could use it strictly for the purpose of presenting it. It's in beta-testing mode. The Leslie software uses a stochastic model and suggests how much money an individual or family will have at the demise of either the principal or both partners. It goes through 1,000 iterations, but it does it instantly, as opposed to waiting 90 seconds. If you change one variable, everything changes instantly. I don't know how it does it instantaneously in a stochastic method, but it does, and it's very efficiently done.

The Leslie model allows you to set the target retirement income. Unlike the Milevsky and Abaimova model, you can start at any age, and you can make one change in your planning between the starting age and your retirement age in how you will save toward retirement and what sort of nest egg you can develop. Both of

them will allow you to buy annuities. Both models will allow you to see that you can annuitize a portion or all of your nest egg. The beauty of the Leslie model is that you can change your spending habits in retirement, which is very important if you're going to think in terms of health expectancy. We decided that at age 85 there would be a significant jump up in people's need for money.

The Leslie model builds in inflation. If I say that there will be an increase in today's dollars, it's going to calculate that increase in tomorrow's dollars. It's building the inflation into the structure all along the way. In preretirement, it allows you to make an initial choice and then change midstream. In retirement, it allows you to start off at age 65. It shows you how your assets are going to be invested then, as opposed to preretirement. You're accumulating first, and then the income stream is giving you income. How much of it is going to be annuitized? How much of it is going to be bonds, etc.?

The model shows you, in decile groups, the likelihood that you're going to have a certain amount of money at any given point in your future retirement lifetime. If you need more money, you change a variable. If you have too much money, you change a variable. It will give you a mean. It will give you a median. It will give you a likelihood.

You can target one of the ultimate cells. If you want to have a 90 percent confidence that you're going to have enough money at age 83, you can do a goal seek, just like in an Excel spreadsheet. You select the result that you want to have ultimately, and you're going to change the amount that you're going to save at one of the two junctures during your savings, or how much you're going to spend ultimately. The program will tell you how much you need to save or how much you can spend to be able to get to the place that you're going.

How do the models compare? They do slightly different things. The great thing about the Milevsky and Abaimova model is that it's available, will tell you your investable wealth and how much of it has dissipated over the course of a lifetime. You can have a variety of mortality tables. The great thing about the Milevsky and Abaimova model that you can't do with the Leslie model is that if a person is particularly healthy, you can use a projected table for the person. We can make him or her live longer, as opposed to shorter. You have your choice in the Milevsky and Abaimova model of real or expected return with standard deviation. That is not available with the Leslie model. But the Leslie model gives you more choices down the road of how you can change and annuitize if you care to do that during the course of your retirement.

The task force is trying to find out how many people have been dabbling in personal actuarial issues, because nobody has tipped over into making it a full-time profession. There's just not enough business out there yet, or we haven't tapped into it. We're trying to see how we're going to relate to financial planners. Working with them is sort of working against them. Our skill sets may be much higher than

theirs, but their marketing is way beyond ours. We have to look into how to market ourselves to the public and not only talk about Social Security and whatnot. We have that expertise, but we also have a lot more expertise.

The last comment I have is that if we go to a privatized Social Security system, the need for personal actuaries is going to be enormous. The popular mindset is to have a pot of gold, but the notion of what you do with it afterward is completely beyond the general population. They have no clue what to do with the money once they get it. As society shifts more toward defined contribution plans and the notion of privatized accounts, it makes our future job as personal actuaries all the more important.

MR. BRAGG: The public comes to us. They trust us. They definitely respect us. In this personal actuary movement, we're trying to build on that.

Let's talk about where we are today. The Actuary of the Future Section is working on the actuarial pioneers. The SOA's image campaign is terrific. What do we do to move forward with this? We need to study how other similar professions have managed to succeed with the public—physicians, accountants, attorneys, financial advisors, orthodontists, psychologists, etc. How have they built their practices? We need to study their advertising, consumer research and compensation. Should there be certification or state licensing?

The next thing to consider is education. There are organizations and consultants in the public that do this sort of thing and are good at it. Education is needed. It's continuing education at the moment. Somewhere down the line, we might even want to have exams on it.

We need to sharpen our abilities to perform. Maybe we need some kind of credentialing system for personal actuaries, internally in the profession. As far as identification and registration, there are many personal actuaries already out there who don't even know that they are personal actuaries. Identifying and registering them on a list is something that needs to be done.

I ran into one yesterday. He is an FSA. He is working with a large accounting firm and putting in programs that influence the lifestyles of employees. His work is about getting on weight-loss programs, quitting smoking and doing all of these things that are lifestyles-related that improve the climate for that large corporation and saves it money. If the employees are healthier, it saves the corporations a lot of money. He's doing this as an actuary. He has all of the information about the effect of weight loss. I was amazed that that kind of thing is going on in the actuarial profession. They sell this service. He's a personal actuary.

Let's talk about coverage of errors-and-omissions (E&O) risk. This is important. It comes up all of the time. Everybody is aware of this. One of the current thoughts is that there are captive insurance companies. Actually, there are more than 5,000 of

them. We could set up a captive property-and-casualty (P&C) company to do E&O coverage for personal actuaries. Serious thinking is going on about this.

You'd think that personal actuary work would all be business-to-consumer, wouldn't you? You're dealing with an individual. But it isn't that way. There are so many business-to-business opportunities. You're going to deal with a financial planner or someone like that who, in turn, deals with his customer. You can deal with others to get to the ultimate customer. You must define compensation models. How are we going to get paid? All organizations have personal actuarial aspects to them.

We need media promotion. We can pick target markets to perform marketing tests for certain services. You select a test case, you select an area and you select subjects. Divorce cases and pension-advice cases are good services to market. You could do this via TV, print or radio. You have to have the metrics to track the results. Many other professions have done this.

There's a newsletter under development. It's a general piece regarding personal actuarial services so as to describe all of this to the entire actuarial world, starting with the SOA. This seems to be an important first step to establishing a unified voice.

The examples are really exciting. One of my personal examples is the go-kart case. An 11-year-old boy was seriously injured in a go-kart accident in Panama City. There was a $1 million liability suit. All of this boy's internal organs were torn up. They wanted to know the future medical expenses of this boy, compared to what they would have been without the accident. The lawyer actually asked if a $4,000 upfront retainer would be good enough. It was good enough. It wasn't that hard to figure out the answers. That is a perfect personal actuary case involving health expectancy.

MS. WINER: I had a request from a divorcing couple that was in joint practice with an optometrist. The husband had many problems, including a lot of mental problems, which made it more difficult to explain to him what we could provide and how we could help him in his case. As far as splitting up the pension assets and what he's going to need, it's important for him to check out his medical expenses and how much he'll need to survive without any income or very low income.

MR. BRAGG: He is disabled. So in this divorce settlement, he should receive a lump sum of money for his future medical expenses. That's what this is all about, really. Again, it's a health expectancy issue.

MR. HOWARD R. UNDERWOOD: On health evaluation, where does the data that you use to construct that information come from? Is it from the Web or from SOA special tables?

MS. WINER: Jack, where does the data come from in the health expectancy

calculations for mortality, skilled nursing and assisted living?

MR. BRAGG: A massive amount of work has been done on this for years. You need two things. The underlying mortality table has to be correct. Then the mortality ratios have to be correct (the mortality ratios to the underlying table that depend on the disease). Those two things have to be correct and not loaded. It turns out that you can't use the established industry mortality tables. In my opinion and in the opinion of a lot of other people, too, they have loadings in them for historic reasons that we know about—conservatism and all that. You have to have good underlying mortality tables and you have to have mortality ratios right for a certain disease. That gives you a little flavor of the answer, anyway. An awful lot of work has been done to come up with all of the underlying information that you need.

MS. WINER: Mr. Bragg is kind of a pioneer. He started the task force 10 years ago or so. He has been putting a lot of effort into creating this. He has a lot of experience with mortality in his own consulting business. So it's really one of his products. As far as these kinds of examples and tools that we have, at this point, anybody could develop them, but it would take a lot of time.

MR. BRAGG: I'm always trying to say that we need all of this information generically. I, personally, have done a lot of work on it, but a lot of other people are working on it, too. I'm not trying to say that what I've done is complete by a long shot. But at least I can give you a little flavor. You have to have the correct mortality ratios, know how to write the programs, etc.

FROM THE FLOOR: I have a couple of observations. As you know, there's a tremendous amount of momentum behind this enterprise risk management initiative. What you're really describing, in many respects, is enterprise risk management, but the enterprise is a person, in a sense. I don't know to what extent you can piggyback and leverage some of the initiatives that are going to be going on in connection with enterprise risk management, but at least that is something to contemplate. Maybe there is some additional bang for the buck or synergy in terms of what you're going to develop that might tie into some of the work that is going on in enterprise risk management, because we know that has a lot of momentum.

I don't know that putting this into the education system is exactly the way to go, but something more along the lines of a certificate or a credential could be tailor-made. If we're going to encourage actuaries to get into this, how would they distinguish the expertise to practice in this area, and would that have a marketplace value? A credential or certificate of some kind might help promote this.

You talked about licensing issues. I don't pretend to have a definitive answer on that. I think that for 90 percent of what you described, you don't need to be licensed to do it. The one area where you can get into difficulty is if you're not a registered investment advisor, and you're giving investment advice of a certain

type, because the SEC does license registered investment advisors. I don't think that comparison of an investment falls into the definitions of that, although I'm not sure. I think that that's the one area where you're most vulnerable. You're going to try to do something without appropriate licensing. That's the area of greatest risk that I see.

My final comment is that if you're going to get into this, you're going to have to deal with a broad number of questions that come up. If you're an insurance expert, you will get casualty questions as well as life and pension questions. You must decide if you are going to try to deal with any question that a person comes up with on a holistic basis or not. One of the biggest issues that you run into, particularly in retirement planning, is a real estate decision. For many people, the biggest asset that they have is a house. Are you going to get into issues like real estate, casualty questions and so forth?

MR. SEROTA: As a member of the Smaller Consulting Firm Section, I learned about the expertise of my colleagues. I was talking about the resources that the SOA offers. But the members of the SOA have incredible skill sets, knowledge and experiences.

MR. BRAGG: There's a disconnect even here. There is certainly an intersection with enterprise risk management, because, after all, all of this is personal risk management. It's the same thing.

On the specialty issues, he's absolutely right. They want to know about their fire insurance. They want to know about their automobile insurance. Their health insurance is a big one. We have always thought that there would be generalists, but there would be specialists in the personal actuary world, too. If a tough question comes up, you can bring in your specialist. It would be like the medical profession that way. In fact, the term "personal actuary" was picked because of the parallel with "personal physician."