2002 Valuation Actuary Symposium
September 19–20, 2002
Lake Buena Vista, Florida

Session 21OF
NAIC Statutory Codification

Moderator: Raymond "Ted" Schlude, Jr.
Panelists: Rowen B. Bell
James F. Reiskytl

Summary: In an open forum, panelists address the requirements under statutory codification, the impact on actuaries, and the approaches being used to meet these requirements. Topics include policy classification, deferred taxes, disclosure, state differences, and implementation issues. Participants gain an understanding of the actuarial issues raised under codification, the requirements for statutory reporting under codification, and the differences and similarities of approaches being used in the industry to comply with statutory requirements.

MR. RAYMOND "TED" SCHLUDE, JR.: We're lucky enough to have Jim Reiskytl, who's Vice President in Tax and Financial Planning at Northwestern Mutual. Jim has been attending NAIC meetings for years and has been an active participant in several advisory groups of the interested parties at the NAIC, including asset valuation reserve (AVR) and interest maintenance reserve (IMR). He has been the chairman of that for sometime as well as a long-time, very active member of the Life Risk-Based Capital Committee (RBC). Jim is also the Chairman of the Solvency and Risk Management Section of the Academy of Actuaries.

Rowen Bell is Director of Financial Regulatory Services for the Blue Cross/Blue Shield Association and is also active in the NAIC with respect to health topics, including health RBC and the Accident Health Working Group of the Life and Health Actuarial Task Force (LHATF). He also participates in various accounting working groups on health-related topics.

I have also been attending NAIC meetings for quite some time, not so much as an active participant, but more as a monitor of these matters for my company.

I'd like to give a brief history of the accounting practices and procedures. The original Accounting Practices and Procedures Manual was issued March of 1999, and it included guidance that had been assembled over roughly a five-year period, through December of 1998. It was not, however, effective at that point. The NAIC worked for another year and issued another manual in March of 2000. They worked through 2000 and issued another manual in 2001, which was really the first manual that provided guidance with respect to statutory financial statements in 2001. It began with the March 31, 2001 statement. Another manual was issued in March 2002, with guidance that the Statutory Accounting Principles Working Group would have adopted through December 2001.

The March 2000 version added an Appendix C with actuarial guidelines, which I think is notable because the guidelines were eliminated from the Examiner's Handbook at the same point. The result, on the surface, was that the actuarial guidelines carry much more weight now because they're not available for examiners to use when they're examining your company. They're now in the accounting manual itself.

There was also a glossary added, which defines key terms contained in certain Statements of Standard Accounting Practice (SSAPs). At the time, it was felt there were some generic terms, particularly on the asset side, such as carrying value, market value, fair value, and statutory book value, that needed some clarification. There were various interpretations issued in 1999, which were mainly asset related. Most of them were very brief, just to provide clarification.

The March 2001 version incorporated SSAP 75 on protected cells for insurance links and securities. Included in SSAP 80 are three additional appendices, which, generally speaking, are the model regulations in the NAIC that pertain to valuation and accounting topics. The models that were added here are the separate accounts funding guaranteed minimum benefits under group contracts, the sister model regulation on synthetic guaranteed investment contracts (GICs), and then Appendix A-830, the valuation of life insurance policies model regulation XXX.

Just going through the differences between the manuals, there was some clarification added with respect to how you illustrate deposit-type accounting for deposit contracts. Actuarial Guideline 36, Application of the Commissioners Annuity Reserve Valuation Method (CARVM) to Equity-Indexed Life Policies, was included in that manual.

In 2002 there was a quite extensive exhibit added to SSAP 10, called a question and answer document, with respect to deferred tax assets and deferred tax liabilities. Appendix A-791, which had been the reinsurance model regulation, incorporated the reinsurance question and answer as recommended by the Life and Health Actuarial Task Force. That was the old JJJ, which was modified and discussed for about two years. Appendix C had two actuarial guidelines added. One is AG9C, Substandard Annuity Valuation, which provides use of a higher mortality standard for a valuation provided there's a demonstration of a certain level of substandardness, for lack of a better term, in the policies. That would be demonstrated during the underwriting process. The second is AG-37, Variable Life, Guaranteed Minimum Death Benefit (GMDB).

As for Interpretation 01-26, the SSAP 51, Reserve Minimum or Required Amount Disclosure, reflected a difference of opinion between the Life and Health Actuarial Task Force and the Statutory Accounting Working Group with respect to what constituted a disclosable item with respect to codification. The Accounting Working Group decided that for all business issued January 1, 2001 and later, a company would need to disclose any material deviation in their reserves above or below the standard.

As for Interpretation 01-28, Margin for Adverse Deviation in Claim Reserves, there was an issue where the SSAPs referred to "management's best estimate." It was unclear to some people whether that meant you could include margins and claim liabilities. I think going back to the preamble, it pretty much embraces conservatism, but they clarified that it was prudent to be able to include margins and claim reserves.

As for Interpretation 01-29, Credit Life Refund Reserves, a state brought an issue to the table, wondering whether it was appropriate in single premium life contracts to net commission and premium tax chargebacks against the gross premium. They concluded that was okay and added some additional language as well.

With Interpretation 01-32, they issued an interpretation consistent, I believe, with the Generally Accepted Accounting Principles (GAAP) guidance for accounting for the impact of the terrorist attacks. There were some subsequent interpretations that allowed companies to have some additional time to get actual reinsurance agreements in place to account for the fact that a lot of that information vanished.

They're currently considering different papers for March 2003. In the Demutualization Issue Paper 117, the GAAP paper had been incorporated into statutory. Several mutual companies raised the question of whether the policyholder dividend obligation in GAAP was an appropriate concept for statutory purposes. I believe that the Life and Health Actuarial Task Force has some initial guidance on this topic. If assets related to a closed block exceed the liabilities, there would be a requirement for a policyholder dividend obligation (PDO). But I think the argument is that statutory valuation embraces some conservative concepts and that it might not be necessary in the case where assets are less than liabilities.

Then there are some questions related to disclosure requirements, one of which is whether or not the NAIC should be deciding what the disclosure requirements for the closed block should be on a reporting basis going forward.

There are a couple of other issues. One is yearly renewable term (YRT) on in-force blocks. This is one that has been contemplated by LHATF in the questions and answers to the reinsurance model, but the accounting people are also dealing with it. It would involve situations where there's surplus benefit created by the YRT reinsurance of in-force business. It would require the deferred gain treatment that is implicit in the reinsurance model regulation for regular reinsurance.

Another area in reinsurance is reinsurance of in-force blocks. The NAIC staff had drafted an initial position that said you would go back to the beginning of the quarter where the letter of intent was signed in terms of determining the cutoff date for determination of deferred gain. This is not consistent with what many states have been doing in that area. The standard approach would be that whatever expenses you are running through your income statement—the benefit you get from reinsurance—you should be able to recognize it through the income statement as well. So companies would draft fourth quarter reinsurance agreements covering all of the current year's issues, and that allowance would run through the income statement back to January 1 of the year in question. So we'll see where that goes.

As for the revised Actuarial Opinion and Memorandum Regulation (AOMR), I believe that has been incorporated now, and you ought to learn something every day. I always thought that these manuals with the date became the guidance for the current year for the first quarter statement, but now I found out that it depends on how the state has adopted codification. Some states basically adopt whatever the current NAIC guidance is at the time you're preparing the financial statement. I think the interpretation is that because the AOMR is now codified, it would apply to 2002 year-end in some states, even though I don't think any states have adopted the revised AOMR.

For those of you who don't know, the revised AOMR would eliminate the Section 7 opinion and add a regulatory asset issue summary, as well as deferring much of the guidance that was specific in the regulation toward the actuary and the standards of practice. They're also incorporating a credit disability table into health reserves, and there were some questions related to clearly defining claim adjustment expenses and related cost containment issues.

The reinsurance question and answer is now just part of the model regulation in Appendix A-791. One of the questions relates to YRT reinsurance and whether it's providing significant surplus gain. If it is, it says it should be subject to the regulation. It's not exempt from this regulation.

On renewal allowances, there's a question and answer that basically says that, generally speaking, you have to cover the company's expenses related to administering the policies going

forward. If, for some reason, the allowances provided in the treaty don't cover those expenses, the ceding company would need to set up a liability for the deficiency between those allowances and its actual expenses.

They've clarified some areas with respect to what I call the deprivation of surplus provisions of the model regulation with respect to combined coinsurance/modified coinsurance (co-modco) and management of credits and charges.

Asset segmentation was a very contentious issue, and the regulators in the industry really couldn't agree on the issue. The regulatory argument was that they wanted some real segregation of those assets, so they created this concept of a segregated asset portfolio. In the case of an impaired company, we know that there are not games being played between what assets are supporting the reinsurance contracts and what assets aren't supporting the reinsurance contracts.

So they included this requirement in the question and answer for a segregated asset portfolio. Generally speaking, you would think that it would mean something like an escrow account or a trust, although I think at least two states provide a mechanism for segregation (I think Illinois at the last session said they provided it). They allow segregation without a specific walling off of those assets legally. It was mentioned that New York has what would be called a filed segmentation plan. As long as the plan is filed and approved by the department, they would allow those assets to remain in the general account.

Finally, there was one other topic that we've discussed from time-to-time related to deferred tax assets (DTA) and how seemingly arbitrary that calculation can be. Generally speaking, a lot of the assets that I've seen in the companies that I deal with related to the next year's worth of deferred acquisition cost (DAC) runoff and the next year's worth of statutory accounting practices (SAP) tax differences. From a modeling standpoint, it's much cleaner to model all your SAP tax reserve differences, and your DAC runoff, and your cash-flow testing model. But then, given the fact that this DTA, or some component of it, is being carried as an asset on your balance sheet, it seems that there should be some consideration or recognition of that asset when you're evaluating the results of your cash-flow testing analysis.

One of the problems is that the rules for recognizing this asset are so darn arbitrary. There are overall limitations where you take the DTA, the goodwill, and electronic data processing (EDP) equipment, and it can't exceed 10%. There are the whole slew of limitations within the income tax SSAP itself. So I just toss that out as a point to note.

MR. JAMES F. REISKYTL: How do I make this topic interesting? I'm talking, after all, about deferred taxes, AVR, IMR, and RBC inaccuracies. It won't even be visual because I couldn't think of an icon for deferred tax. I can't think of any deferred tax jokes.

The inaccuracies occurring with risk-based capital filings by companies is a real growing problem. I can speak with a little passion about the last item I plan to discuss because I do feel passionately about the future of insurance regulation. Perhaps the update I can give will be interesting enough to give you a reason to listen.

As a concept, deferred taxes are very simple. You have two different accounting systems. You have a statutory accounting system, and you have a taxing accounting system. Wherever they differ, you multiply by the tax rate of 35%, and either end up with a deferred tax asset or a liability. So the concept is pretty straightforward. It can't be much simpler than that. Now, how you get the numbers may be an issue, but when you get all done, you have a financial statement. When you get all done, you have a tax return. To determine deferred tax assets and liabilities, all you have to do is tax effect the difference in the results.

The amounts actually recognized in the statutory financials get more complicated because there are a bunch of controls or limits. As Ted said, these include: 10% limits, total taxes paid in the last three years, and next year's tax planning. I'm not going to try to fill you in on all the details. There are a bunch of constraints on what amounts can be recognized, and these constraints make some of the reported results volatile from year to year.

One of the obvious questions that I get in the risk-based capital world (and maybe your own management also asks this) is what is this deferred tax asset (DTA)? Is it real? Can I use it to pay the bills? It's an asset, but should I think about it when I pay shareholder dividends or

policyholder dividends? How likely is it that it is going to be there? When you look at it, you will find out that most DTAs are really going to be quite predictable.

Why would I make such a statement? What are the primary sources of deferred tax assets? The first one, for most companies, is acquisition costs. Everybody knows that in a statutory blank you write these expenses off immediately. For taxes there is a formula to determine when the acquisition costs will be recognized over the next 10 years (five years for smaller companies). This item is pretty clear. You'll have to do some limited cash-flow analysis of how much is going to turnaround in the next year, so you know how much to reflect in this statement.

Reserves, I guess, are equally straightforward. As actuaries, you know that you have to set up the appropriate amount of reserve for some mysterious standard to cover an appropriate deviation. Someday we may set a standard like 85% or 83%, which is what most actuaries are probably doing today. However, that might be a real tough standard to have to meet.

The tax man says forget about it because all you are trying to do is take deductions. We're going to create what we call an applicable federal rate (AFR), we're going to use a method, and we're going to tell you how much you can deduct. If the product has cash values, this tax standard doesn't have much effect since the tax result is never less than the cash value. If the product doesn't have cash values, it has quite an impact on the results.

Deferred compensation is another obvious one. Financial accounting says you have to set up a liability. The tax people say we're not going to give you a deduction until you pay it. So we have a difference. Prepaid employee benefits is similar, where you may have a current liability, but it may not be tax deductible until paid.

Why do I say much of the total DTAs are going to be relatively stable from year to year? Because these differences for the items described are not likely to change dramatically. Sales change a bit from year to year, and reserves change a bit, but not a whole lot. They're fairly predictable within some range of expectability. What are the notable exceptions? What about all the losses being taken now on impairments? They're write downs and defaults. They're unrealized, and they aren't

recognized for tax purposes unless they go to zero. These unrealized losses are part of DTA. The basic difference is that they're not recognized for taxes until they're actually sold.

The tricky part of this is that they are, or may be, restricted. All the deferred tax assets are recognized for GAAP, but they're not all recognized in the statutory annual statement. In other words, you do the calculation. You did the simple A minus B times 35%. Then you look at all the constraints, which say for some companies, every single DTA will be recognized. At the other end, we saw one company last year-end with 76% of their DTAs not being recognized in the statement. The mode is somewhere in the 30% to 40% range. They were often limited because of deferred tax liabilities (DTLs).

Deferred tax liabilities arise from unrealized gains on common stock that obviously can vary quite a bit. All DTLs are recognized and DTAs can always be recognized up to the amount of DTLs. And so you have a rather nonmoving part measured against a vastly ever moving part, as we've seen in the last two or three years, and even in the years before that. So we may get fluctuation due to changes in unrealized stock gains.

The second limitation is you have to carry it back three years and measure it against the taxes paid during those years. That shouldn't usually be volatile, but nevertheless it is a constraint.

The third—and here you get into some of the 35 pages of questions and answers—is that if you have tax planning and if you think that you can turn this thing around, you can also deduct those if you think you can recognize them in the next year. The issue is whether you are going to do some tax planning that would recognize tax losses in the coming year.

Is there likely to be some variations in DTA recognized results? Since I didn't know how much they're likely to vary, I asked my friends in a very unscientific, nonactuarial survey. I simply asked a bunch of people that I knew what they thought. The responses I received were that two people said they think it's going to stay about the same. Guess what the rest of them said? We don't know. So my response is: we don't know!

What about DTLs? The largest and most obvious variable is, as noted earlier, common stock. I don't think I have to say anything more to this audience about that. The other major components were reserves and the classic "other category." Now, if you know what other is, tell me and the others. All I know is that "other" was the third highest category. So there's a little humor in this talk.

If you've opened an annual statement year-end and had a little fun poking around in it, as a tax man, it's a fascinating exercise, because unlike GAAP, which tells you almost absolutely nothing, it tends to tell you everything. Unlike the 10(k)s and everything else, most of the useful detailed information is well hidden thanks to the actuaries, lawyers, and accountants.

In this case, the initial results are rather fascinating. If you look at some companies footnotes, they actually lay out and match items in very transparent accounting. For example, tax reserves are shown in column one, and book reserves are in column two. The difference, X, is multiplied by 35% to obtain the answer. Investments, write-offs, and thirty-five items are all laid out nicely and clearly. If you're interested in analyzing the make up of the DTAs or DTLs, it's all there—the ultimate in transparency. But there are some other companies that reported our DTAs and DTLs are 35% of the differences in one sentence, which probably fits more in the category of GAAP and other disclosure, than the full disclosure of what's going on. It is an accurate statement, but, as some have said, "very accurate, but totally useless."

So we have a wide range in the reported breakdown of results for the major deferred tax components. The tax committee has taken a fresh look at this to redetermine whether there should be some general, more specific, standards. It is interesting that the same accounting firm is giving acceptable opinions to the whole range or spectrum of forms of disclosure, which is fine, because it's brand new and they're trying to figure out what to do. One of the things we might talk about later is what is good or appropriate disclosure.

If the world moves to more transparency, if that truly is going to happen, DTA/DTL disclosure could be a candidate for transparency and, therefore, more rather than less disclosure could be required. We'll see how long the transparency bubble lasts.

If you're from New York, you may have been asleep up to this point because you don't have a DTA and DTL. But you do have to disclose it in your footnotes, and the footnotes vary significantly among New York companies. If you don't follow codification because your state doesn't let you, you have to disclose in a footnote what the differences are. I have heard that New York may adopt deferred tax accounting in the near future. Is that true?

FROM THE FLOOR: It's on the governor's desk. If he doesn't veto it, it will become law in 60 days.

MR. REISKYTL: Okay, so it is imminent, hopefully. SSAP 10, which is the one on taxes, has 38 pages of questions, answers, and examples. Actually, it's a very useful document if you have questions. At least it attempts to give you some understanding of what to do. I think that also goes back to the idea of talking about principles rather than getting so locked up in the rules. The principles are fairly self-evident. The more questions and answers you do, and the more rules you do, the more you're beginning to be able to work your way around things.

I'm going to stop talking on taxes, and I'm going to talk about the AVR and IMR Bluebook that describes the conceptual structure and development of these reserves. I'm interested in this topic because I chaired that effort for a number of years.

As you know, AVR and IMR apply only to life insurance. They don't apply to health or to property/casualty for obvious reasons. As a life insurance actuary, it's very easy for me to talk about the interrelationship of assets and liabilities. As such, I also have great difficulty with accountants who seem to think that, for fair value purposes, you can value the assets while ignoring the liabilities that are separately valued. But if you were a property/casualty person or a health person, you'd say that makes eminent sense. When the two are hopelessly intertwined, as they are for permanent life insurance, you really struggle with the idea that they can be valued separately. And, of course, that's part of the ongoing debate and discussions.

AVR and IMR only apply to life insurance companies and life insurance long-term products where it makes some sense. From my perspective, I would suggest that if you're not setting aside

the investment risk premium portion of investment earnings, as is done with the AVR, you're always distorting earnings which, of course, is done for GAAP where the earnings are enhanced until actual losses occur or are almost certain to occur. I'm an actuary and not an accountant.

What happens? I'll give you a simple example. Buy a high-yield bond. In today's market, Treasuries are at 4%, or you might earn 7%. They don't pay you 7% because you're good looking; they pay you 7% because you're taking risk. Arguably, of that 3%, at least 1% is the risk premium and maybe 2% is the margin paid for taking the risk. In my opinion, a good accounting system that matches assets and liabilities should set aside this risk premium each year to cover future losses. It's like paying for fire insurance and then not charging the risk premium to earnings because no fire has occurred. You took the risk. You know you're not going to get 3% in all cases because, if you did it, the bond would be a AAA, but it isn't a AAA. There is a high likelihood you're not going to get paid. You don't know which bond won't pay, but you know you're not going to get paid on all of them. Hence, you should set the risk premium each year aside, at least from my perspective. Maybe that doesn't make sense for others whose assets aren't directly tied to liabilities—where it is very difficult to even estimate the liabilities. In these cases, I can see where you don't want to fine tune assets very much, and that's fine with me.

Let's look at the Bluebook. What does it do? It's a resource. It's documented rationales. So it's going to tell you how these things are derived, why they were derived, and why they make sense. It has all the models and all the assumptions. Talk about transparency; it's all there. If you're interested in having a better understanding, you ought to take a look at it.

I want to focus on fixed income for a moment and give you a little history. The AVR and IMR were part of the original valuation actuary concept. We didn't want to hold it up to finish it, so we separated the two. Also, at the time, we didn't set a reserve standard because we didn't think actuaries were prepared to meet such a requirement. At this conference everybody talks about 83% or 85%, but you won't find that anywhere in valuation standards. I'm now suggesting it's time for the actuaries to step up to the plate to do it. If we're ready to do that now, that's fine.

As I mentioned, we struggled with what to do with asset defaults and credit defaults as we were working on the valuation actuary concept. If you know me, I'm a great delegator. I said I don't want to grapple with that; I'm going to put somebody else in charge. We'll put an investment expert in charge and call this thing AVR. We're going to say, the investment expert can sign off on it and give it to me. Then I, as a valuation actuary, in good conscience, can just add the numbers for these risks and go about my business. I know what I'm doing.

I've done a little informal survey of this, and I'd like to ask you a question. When you do your cash-flow testing, are you providing for 85% asset default as part of that testing? I have found that there are a lot of people who don't even have it in their cash-flow testing or who have deducted 10 basis points or something like that, but not much detail as to recognizing the possibility of these losses. You should realize that, as valuation actuaries, you have an option. You can simply use that part of the AVR and ignore modeling those parts of the risks, or you can model the default risks.

I would suggest that you might want to do a little internal testing. Just turn off your default switch in the model, look at your results, and compare the difference in model results to your AVR results. If you're getting numbers that are dramatically different, scratch your head. Think about why you have the same standard and you have grossly different answers. You might find the AVR to be something practical and something that you will use. It already has measured these risks at the standard I need. It's simpler to use it. At least it's a suggestion.

The second reason why you might be interested in reading this material is that there's a very interesting implication for risk-based capital requirements. If you have this disciplined process, like the AVR, where you set aside the risk premiums each year and use them to pay the claims as they occur, guess what? The RBC factors are roughly half of what they would be if you don't have an AVR. That difference is based on our original AVR modeling. I think common sense will tell you that you might have some difficulty if you simply release the risk premium to the gain from operations each year and a few years later a default occurs. Clearly, you will need more money to cover the losses than if you had set aside some money each year as you went along to cover the future loss(es). It's the basic concept of an actuarial reserve for future risks.

In other words, why do we set up any reserves for term insurance? Why don't we just book the premium, and report the premium as profit until a claim occurs? If we get a claim, we pay it out of earnings that year. I think the same is true in accounting for asset defaults. If you like that concept, fine. Don't set up any term reserves and when the claims occur, just pay for them when they occur. Of course, you do have to give a valuation actuarial opinion, so you probably can't do it. I think you cannot ignore your obligation on asset defaults either.

A third point is the interest maintenance reserve (IMR). To me, all that the IMR does for a life insurance company is to recognize reality.

Accountants have this strange idea. When a bond is sold when interest rates are up or when interest rates are down from the original rates, they call the difference in value from book value a loss or a gain. Actuaries scratch their heads and look at it and say, "But I turned right around and had to invest in that same market." Let's take a simple example. You had an 8% bond, and you sell it today in a 4% market and report a large capital gain. Unfortunately, you have to go out and reinvest that money again. What happens when you reinvest? The resulting cash flow is unchanged unless you're a miracle worker. You'll likely earn five or ten basis points at best.

Basically, the whole concept that there's a gain or a loss is just nonsense as far as I'm concerned. It is absolutely meaningful if you're going broke at that moment because it's real money that can be used to pay current expenses or claims. For an ongoing operation, it's neither a gain nor loss.

It's just an accounting creation that actuaries should explain to them. I tried to explain how this would eliminate cherry picking to the FASB, but I think they thought actuaries shouldn't have anything to do with their accounting world, so they ignored me.

The next topic is RBC errors. I hate to even bring this one up because it's very embarrassing. I've been involved with RBC for 20 years or however long it has been around. Larry Gorski, an Illinois regulator, one day started looking into the calculations. Guess what he finds? Inaccurate data all over the place. Does that mean everybody's doing it wrong? No. But it wasn't just one or two companies. What did he find and why do I feel that actuaries should get involved?

RBC has a common stock concentration factor. You have to list your top five stock holdings. Guess what some people put on their RBC disks? Although they own common stock, we see zero, zero, zero! Pardon me, none of your stocks were among the top five holdings of common stock, were they?

We have a mortgage experience adjustment factor. You know what that is. We don't have ratings on mortgages, so we look at your company experience relative to that of the industry. Guess what? Some companies have had identical experience to that of the industry experience every year. It's just amazing how that can happen. The factor is always one. It could be right. It could also be most suspicious. Unfortunately, there's a lot of that kind of reporting.

Chances are that the person filling out your RBC disk is not an actuary. What I'm recommending to you is to get you or someone else in your company to at least look at it because any number of errors could occur.

Time prohibits discussing the future now.

MR. ROWEN B. BELL: When I was asked to come here, I think it was so I could provide a little bit of a health insurance industry flavor to the discussion. After hearing some of Jim's remarks, I do feel like, once again, I'm in a foreign country with all this AVR, IMR talk, which, thankfully, I don't have to pay attention to.

Many of the things that you pointed out, Jim, certainly, are true on the health side of the fence, especially with respect to RBC inaccuracies. One of the big things in the health RBC, Treatment of Health Insurance Products, involves a place where companies are allowed to give themselves a credit based on the nature of their managed care arrangements. It's basically up to the companies to self-categorize the types of agreements they have and how much credit they get. You'll look at some filings, and every single claim that the company paid in that year (regardless of what hospital, pharmacy, or physician it was to paid) had exactly the same level of managed care. That would be a remarkable coincidence, given the sort of out-of-area coverages that one has to deal with. So there's definitely room for sufficient actuarial oversight in RBC, not just on the life

side where you guys have moved more and more toward company-specific reporting in recent years, but also on the health side.

What I really wanted to cover are some of the ways in which codification of statutory accounting has changed since it was first issued. I'll do it from a health insurance standpoint, focusing on things that have happened during the last year.

Statutory accounting, the new version or the next generation, really took effect in 2001, but it's a living, breathing thing. Every quarter, decisions are being made at the NAIC that affect what statutory accounting is.

As you may know, the Health Reserves Guidance Manual was a project that originated with the Academy and then was taken up by the NAIC and officially adopted by the NAIC's Accident and Health Working Group in late 2000. It was really, in some sense, written for the insurance departments so that they would have guidance on what company actuaries are supposed to be doing in setting up health reserves and some guidance that they could look at when they're examining a company. The guidance became very useful to the health actuaries in the company who were setting up the reserves as kind of a reminder of the considerations that they were supposed to take into account.

When the manual was developed and approved by the NAIC, it wasn't really intended, necessarily, to have any particular force of law. Nonetheless, it was recognized by the statutory accountants that it was, certainly, a very useful piece of guidance. So earlier this year they thought it would be worthwhile to actually make mention of the guidance manual within the relevant statutory accounting principle.

You won't find what I'm talking about in the most recently published book, the one published back in March. It doesn't have this new reference to the guidance manual in it because that reference was only adopted in March after the manual was published. You would need to go to the NAIC's own website and download the latest revisions in order to see what I'm talking about.

I think it's important that you or someone else in your company is doing that continuously to see what has been going on throughout the year.

Statutory accounting isn't static. The way in which each state has adopted codification can be different. But I would say in the preponderance of states, any decision made by the NAIC that is immediately effective in terms affecting what codified statutory means, then that decision automatically takes effect in that state. One example is a passage in the claim liability SSAP that says, "Relevant guidance is provided in the Health Reserves Guidance Manual." It's important that people are aware of those sorts of developments.

The first issue that I want to talk about is SSAP 84 on health care receivables. The codification project was several years of work between industry and regulators. And when I say industry, I primarily mean the life and the property & casualty (P&C) industries together. There was relatively little consideration of issues unique to the health industry during that process. I was reminded recently that a common viewpoint through those years has been that when the health industry came to the table, they were told, "Go away, we're busy with our life and our P&C stuff, and we'll get back to you later." Then, when the health folks came back, they were told, "You should have been here all along. We've already resolved these issues. We don't want to know what you have to say."

As a result, by the year 2000, with the manual already having been published in its first form and with this new basis of accounting coming online in 2001, the health industry realized there were some serious omissions from a health insurer's standpoint. The way statutory accounting works, if there is any asset that you might want to admit to count within your statutory surplus, you need to be able to point to a specific place in the accounting manual that says, "Yes, this is an admitted asset." There were several potentially important classes of assets for health insurers that were not anywhere in the manual and that were, therefore, going to have to be nonadmitted. For some health insurers, it would have adversely impacted their surplus by 10s or even 100s of millions of dollars.

There are five types of assets that we're talking about in SSAP 84. The first is pharmaceutical rebate receivables, where the insurer has an arrangement with either a pharmacy benefit manager or possibly with the pharmaceutical company itself, directly, where the rebates are going to be paid to the insurer based on favorable utilization of the drugs. Receivables established in connection with those rebates were not originally addressed in codification.

The second is claim overpayment receivables where, as the insurer, you paid a certain hospital too much money on a particular claim, but you have an expectation of getting that claim back. Again, that was not covered prior to SSAP 84.

The third is the more important and general category of loans and advances to hospitals and other providers. Some insurers and, particularly some states (Maryland would be a great example of this) finance hospital operations by paying the hospitals money upfront, and then as claims come in they draw down that balance, but on a revolving basis. Thus, there's always a fair chunk of money outstanding between the insurer and the provider. But if you were to shut the whole operation down as of, say, the valuation date, the money that has been advanced to the hospital would accrue back to the insurer as the claims run-out comes in. It makes sense for this to be an admitted asset. Again, for some companies, this can be quite sizable, but it wasn't considered during base codification.

The fourth and fifth examples are subsets of that approach. There's the idea of capitation payment advances and risk-sharing receivables. As you probably know, health insurance tends to have a lot of risk-sharing arrangements with noninsurance entities, provider groups, and others, which, coming from my life/health background, looks like reinsurance. Why aren't you just calling these people authorized reinsurers and using reinsurance accounting? But that isn't the way it developed. They don't think of themselves as reinsurance. They think of themselves as providers accepting risk, so it's not viewed as reinsurance. Instead it's viewed as a risk-sharing arrangement.

These issues started to be discussed in early 2000, and it took a full year-and-a-half to develop the accounting guidance, in terms of the industry working back and forth with regulators and

educating regulators on what these issues were. The guidance was finalized in September, and in December, the full committee of the NAIC blessed it. There's a requirement that states for any accounting change to be effective, it has to be approved by the full membership of the NAIC, which meant a one quarter delay. So it was 100% official in December of 2001, yet it was immediately effective at that year-end.

What was the nature of the guidance? The general thrust of it was that, yes, you can admit these types of receivables. The financial reporting presentation, however, needs to be done on a gross basis. Many of these types of receivables, in a broad sense, relate to the unpaid claims liability. I think many people were, prior to the issuance of this guidance, not presenting these as a separate asset on the balance sheet, but instead were just netting them against the liability. Thus, the unpaid claim liability that the actuary was opining on had implicit consideration of some of these items.

That type of treatment is no longer allowed. Under the SSAP 84 guidance, it has to be a grossed-up balance sheet presentation. There are also lots of restrictions and conditions on when you can and can't admit these types of receivables. It's like the 90-day rule for doing unpaid premiums. There are similar types of admissibility restrictions here.

There's also an unusual sort of admissibility restriction with respect to an advance made to a particular hospital, for example. You're only allowed to admit, in some cases, up to the liability for claims in the course of settlement and, in other instances, up to the full incurred but not reported (IBNR) claims liability for that hospital alone, which raises an interesting actuarial issue. You now may be asked by your finance folks, for example, for the IBNR for just St. Joe's Hospital. It's not necessarily something that your existing methods would have allowed you to compute.

There may be some health RBC changes at some future point in connection with this new guidance. Health care receivables, in the existing statutory accounting before codification, weren't delineated in the same way that they are now. In the prior system, the five different categories weren't there so there was just a lump sum credit risk applied to anything that you, the

company, thought was a health care receivable. Now that there's a greater delineation, I think we will eventually see some changes to the health RBC guidance. The Academy is wanting to wait a little longer so that it has a little bit more data.

Let me move now to another more recent item, SSAP 85, which has to do with cost-containment expenses. It's guidance that was passed in 2002, but with a delayed effective date. It's not going to be effective until year-end 2003. The idea here is that health insurance has really evolved considerably over the past couple of decades, with managed care techniques being used extensively. Traditional financial reporting, which classifies everything as either a benefit or an expense, is not particularly well suited to the way in which health insurers now operate.

Health insurers are now spending considerable sums of money on things that aren't contractual obligations. They're not official benefits under the terms of the insurance contract, but neither are they pure administrative expenses, things that you need to do in order to see that the claims get paid, or the business gets sold, or that all the general administrative work of the company gets done.

This middle ground, these cost containment expenses, are monies that the insurer is spending voluntarily because by doing so they think that they're going to keep the cost of the incurred claims and total benefits down. I'm talking about things like utilization review, large case management, any sort of anti-fraud activities, access fees that are paid to provider networks, fees to the pharmacy benefit managers, or the costs that an insurer has if it in-sources rather than outsources its networking function (as many of the larger insurers do by establishing their own network). Those costs are, again, things that they wouldn't be spending money on, except for the fact they think it's going to save benefit costs. Disease management and certain appeals costs, have been labeled as cost-containment expenses.

What does that mean from a practical standpoint? The idea is that if you were probably starting over again and doing financial reporting for health insurers, you would want to know the pure benefits, the pure administrative costs, and these cost-containment expenses as three separate

items. With this accounting guidance, and with some similar changes to the blanks that are going to be considered by the NAIC next month, the idea is to move toward that trifurcated paradigm.

The reason that the regulators are bringing this issue up is largely because there's tremendous inconsistency between health insurers today as to how they're reporting these items. Some companies are lumping some or all of these costs in with their incurred claims, thus showing higher loss ratios and lower administrative expense ratios. Other companies are doing the opposite and, therefore, are seen as having lower loss ratios and higher administrative expense ratios. The NAIC has been trying to develop more and more analytic tools for regulators to use to evaluate health insurers. Lots of those are ratio-based. If the data underlying the ratios is inconsistent, then it's garbage in, garbage out; so they're trying to get greater consistency.

The accounting guidance itself is an amendment to SSAP 55, which is the guidance on claim liabilities and claim adjustment expense liabilities. All that the accounting guidance really says is that at year-end 2003 when you, the actuary, are setting up and opining on your liability for claim adjustment expenses, you need to take into account in that liability any due and unpaid items for things like network fees, utilization review views, and all the things that are in the cost-containment expense category.

Assuming these blanks changes that I'm talking about are approved in the near future for first quarter 2004 and forward, then the blanks will have this trifurcation, so there will be a separate presentation of the cash items—things that are cost-containment expenses. You'll be tracking those now separately. They're not a part of claims. They're a subset of expenses, but they're a separately identified subset of expenses.

And so, in the five-year historical page going forward, there will be two different loss ratios presented for health insurers: the ratio of just the pure claims to premium, and the ratio of the claims and the cost containment expenses together to the premium. As I said, with SSAP 84 and the health care receivables, it seems likely there could be an effect on health RBC, but that is still up in the air and, obviously, it wouldn't be an issue until 2004 when the new financial reporting takes effect.

As for Interpretation 01-28, the interpretations are found in Appendix B of the accounting manual. They represent interpretations of existing guidance rather than changes to the guidance. The guidance in SSAP 55 on the unpaid claim liabilities says, "Management shall record its best estimate of its liabilities for unpaid claims." That's language where the meaning is terribly unclear, and it has been discussed to death. This particular piece of accounting guidance applies to all lines of business. They were trying to come up with something that was as true for P&C as it was for health. This was the language they came up with.

The NAIC was asked for clarification. Specifically, with respect to accident and health business, what did this language mean? They came up with a rather Solomonesque statement: "The concept of conservatism is inherent to the estimation of reserves, and, as such, should not be specifically prohibited in the consideration of management's best estimate. On the other hand, there should not be a specific requirement to include a provision for adverse deviation in claims."

So where does that leave us? Your guess is as good as mine. If you want to express a guess, you're more than welcome to join the Academy's Best Estimate Work Group as well. This is meant to be a joint effort involving both health actuaries and casualty actuaries to try and talk about the issue on a joint basis. This came as a result of the fact that last year, when the NAIC was discussing this interpretation, the Health Practice Financial Reporting Committee wrote a comment letter, and the Academy's Casualty Practice Council objected strenuously. The comment letter, as a result, was never sent. Balancing the interest of the two industries with respect to this language is a tricky proposition.

I want to talk to you a minute about health blank migration. That's my own phrase, so feel free to laugh at it. As you probably know, the health blank is a relatively new construction. It also started in 2001. It is an orange colored blank that both HMOs and HMDIs, which is to say Blue Cross-type companies, file. Prior to that, there had been separate blanks for HMOs and for HMDIs. Now that there really is a single blank that most health writers in the U.S. are on, it was thought, well, it would be really nice if we could get all health writers in the U.S. When I say health in this context I need to be very clear that I'm talking, basically, about medical and dental-type business. I'm not talking about anything that has a tail, like disability income or long-term

care. There are some companies that follow the life blank or even follow the P&C blank, but if you look at the business they write, it might be 98% or 100% group medical, individual medical, or things like that. The idea is to take those companies and have them formally moved over to the health blank, so that all the companies whose sole focus is health are subject to the same set of accounting standards, exhibits, disclosures, and so on.

This is going to start kicking off in 2003, but there's an extensive phase-in period, so it really won't be until 2005 that any company that qualifies for migration would be forced to migrate. I do understand some states are situating companies to move over early. We may see a lot of that in 2003 because the 2003 health blank, for the first time, will contain some supplemental exhibits; for example, there's one version of the exhibit of life insurance, a version of the property/casualty Schedule P, and so on. Thus, if you are a company that mostly writes health and does a little bit of life or disability, there will be enough information on the health blank to satisfy the regulator.

If an entity moves from the life blank to the health blank, my view is that they're no longer subject to AVR or IMR requirements because that's part of the statement blank instructions more than it is a legal requirement. On the other hand, the actuarial opinion memorandum regulation is tied in with the standard valuation law, which itself is tied in with how you are organized as a company. So you're still a life insurer in the eyes of your state, even if you're filing the health blank, and you'd still be subject to the AOMR requirements as opposed to the health actuarial certification standards, which is a somewhat different asset adequacy analysis at this time.

Rather than make reference to model laws, codification tried to take excerpts from those model laws and put it in as an appendix. In particular, from a health-reserving standpoint, the Health Insurance Reserves Model Regulation has been incorporated as Appendix A-010 of the manual. Some questions have been raised when they looked at this as to whether they created unintentional inconsistencies and conflicts in terms of what the regulation actually says and what codification is telling you to do with respect to a particular issue.

An Academy report was issued in 2002. It tries to shed some light on this subject and some related subjects, such as areas where the standards of practice are perhaps not keenly in tune with the new codification requirements. This is something that the Accident and Health Working Group (the regulatory actuaries at the NAIC), are taking an interest in. They're trying to come up with a set of recommendations to achieve both internal consistency of getting the model regulations in sync with the accounting manual, and also, more importantly, consistency between different types of entities that write accident and health business.

For example, if you're a life insurer, and you're writing group medical business, you are formally subject to the Health Insurance Reserves Model Regulation. You're subject to the asset adequacy analysis requirements. Whereas an HMO writing exactly the same business is not entirely subject to the same reserving requirements and, as I said, is not subject to the asset adequacy analysis requirements. Regulators think it will be best if everybody could be subject to the same sort of requirements and certification standards inasmuch as that is possible. So they're starting to explore it. It's not entirely clear where it's going to go, but I'm sure somebody will be talking about those issues at future versions of this symposium.

MR. REISKYTL: Rowen, I think we may have the beginnings of an answer to a best-estimate definition in some of the work we've been doing on the RBC C-3 Phase 2, which deals with guaranteed minimum death benefits and guaranteed living benefits. I'll mention it, and then you can react.

What we have attempted to say is that if you're making a best estimate and you have a lot of data, like the S&P for the last 50 years, then your best estimate, arguably, should be well-founded and include little margin for adverse deviation. On the other hand, if you're dealing with how many people are going to take a guaranteed living benefit under a variable annuity, where no one has any data or any idea of how it works under different conditions, your best estimate will include significant margins.

The basic point is that where information is scanty, your best estimate should be on the conservative side. The best estimate there doesn't really mean what you think it might be. If you

have quite a range of possible results, because the data aren't there, best estimate should encompass substantially more adverse deviations for possible circumstances when making your best estimates. You have an impossible task of trying to figure it out—maybe this helps.

MR. BELL: Yes, I think that's a nice thought, Jim. It's great to hear Dave Sandberg and people like that when they're talking about unified valuation. You made reference to 83rd percentile considerations, and I think that works great in a universe where you can build the quantitative models. We've alluded to the fact that that's not always true, even within the life industry context. Certainly, it has not historically been true within the health industry context. I don't think that we tend to come up with 95% confidence intervals around our reserves, and maybe it would be wonderful if we did. But we're not doing that and given that we're not, we can't quantify things in the way that some people would like to see. They want the entire valuation system to move toward that type of quantification. In circumstances where the quantification isn't possible, the fact that standards for best estimate are not strictly a 50th percentile type of standard is helpful.

MR. REISKYTL: So what's my future view of where risk measured regulation is going to go?

Perhaps the future is a move beyond codification, but I think it fits within the general framework. It gives me an opportunity at least to express some views that you may want to think about. Suppose you were asked to design future risk-based regulation. What kind of constructive suggestions would you make? What would you do to have a better regulation system in the future that is likely to include products and new guarantees? The states are just beginning to adopt the 2001 CSO mortality tables. Some of my friends who know all the answers say that the answer is a unified valuation system or UVS. If you know me, you know that isn't my answer. It's not that I disagree with it in concept. I just believe that we're not to the point where one can simply model all risks and their interaction. In fact, we're a long way from there in many areas.

To reduce this gap, various research projects are under consideration. I chair two groups for possible future Society of Actuaries research, one dealing with covariance of risks in the tails and the other with policyholder behavior in the tails. One reason I chair these efforts is because, even

though we make assumptions, I have no idea if they're right. If someone does know, hopefully they'll come forth with research as we request it from the Society. We're trying to get better answers. They're also looking at this internationally.

But back to my basic construct. I believe the regulator has at least two roles. Here I'm not getting into product approval. I'm only dealing with financial regulation. From my perspective, there's a chasm between them, even though they're interrelated. Think of a big chasm where the two sides can't even see each other but realize full well that they're connected.

My view of the regulators is that they are there to set minimum capital procedures and structure designed to identify weakly capitalized companies and take them over when other remedies fail. Most importantly, as companies become weakly capitalized, they counsel, guide, cajole, and force changes so that the companies don't go broke and people's promises are fulfilled. Their role is to protect the policyholders and to do their best to see that when companies sell an insurance benefit, the benefits, in fact, will be paid.

You'll notice my emphasis for the regulator role is on minimums—the minimum reserves and the minimum RBC. I happen to like a formulaic RBC wherever possible for the latter as it is a simple and precise measure. Some might argue that won't work for variable annuity guaranteed minimum death benefits and guaranteed living benefits. Clearly, you can't concoct a generic formula to deal with some risks. They may not be traditional formulas; nevertheless, they're formulas. The Canadians, by the way, have come up with factors for these benefits. What do I mean by saying they are still formulas? They are company-specific formulas based on their own modeling. Let me explain. To measure some risks, you have to generate interest models, equity models, and adjust for the interrelationship of these risks. Then you will measure the risks covered to a certain level such as 90 conditional tail expectation (CTE). But wait a minute. You just said that you're going to do all this stochastic work to measure the risks. Why did you suggest that it's still a formula? Let's step back a minute. How do we get any of the current RBC factors? We did stochastic testing for default risks of AAA bonds, or Class One bonds. From that work, we created a generic factor for everyone to use for default risk on Class One bonds.

With these guaranteed living benefits and these guaranteed minimum withdrawal benefits on variable annuities, you're going to run thousands of scenarios for six or nine funds. You can't run every fund. Some companies have hundreds of funds and there's not enough computer capacity to run each one separately, so you're going to establish RBC factors for your grid of six to nine representative funds. Let's say you use the Morningstar grid, and you develop factors for your specific products and your guaranteed benefits. Then you're going to take hundreds of funds and use your actuarial judgment to say where you think one lies and that one lies on your grid. Pick a factor for that fund, and so forth. So this isn't nonformulaic. In fact, it is formulaic but company's specific formulas are not generic ones. Some might say I'm playing with words, but so be it.

I believe this is a consistent conceptual RBC framework, and we're still dealing with formulas. Why do I want to have minimums expressed as formulas? It's because this is a precise point for possible action or takeover. One thing I'll guarantee you is that if we were to shift to being taken over based on your own assumptions, there isn't going to be much left in that company at that point to rehabilitate or save. If you go to your CEO and say, "By the way, if I use the assumption of X, and not X plus delta, I can avoid being taken over." Your CEO is not going to choose the route that gets you taken over. So moving from current structure to a completely internally model-driven structure has inherent in it the fact that when you're taken over, there won't be much, if anything, left. You are broke without any hope. There is an assumption that when the company is taken over, there is something left such that another management could buy that block or company and perhaps pump oxygen back into it.

So that's one side of the wall. The other side of the chasm is solvency and risk management that the company does to manage its risk effectively. I believe that this is a management and not a regulators' function. Management should decide how much surplus above minimums it should have. They could have a lot of surplus or very little surplus. They can take risky ventures, or they can only take nonrisky ventures. Each company should have a fairly sophisticated solvency and risk management structure in place. Very sophisticated in some cases may be the back of an envelope. In others, very sophisticated may be thousands of computer runs. That's up to the actuary and the company to decide.

In this structure, I would focus regulatory review on three things. Number one, what are the risks the company has? The NAIC is moving in this direction to try to do more risk analysis. First, identify the risks. Second, what did the company do to offset those risks, in terms of hedges, reinsurance, product design, and so on? Finally, what risks are left? Identify the top five or six major areas where you have bet your company. Then you should measure and analyze these risks. You could have a discussion, and the regulator could review it. They may also want to know that such a process is in place. We shouldn't assume these decisions are subject to regulatory approval unless they could make the company become weakly capitalized. Risk taking is management's responsibility, although I think the regulator has a role.

For example, if I am to produce a new guaranteed benefit or a new product, I believe that it's an obligation in the company and the actuary to demonstrate that you haven't put the surplus of the company at so much risk that you may become a weakly capitalized company. The burden is on the company and the actuary upfront to demonstrate that what is being sold and guaranteed is sound and that the risks are within the range of acceptability. What should the regulator do? Regulators will have to be aware and approve changes, use their own judgment, and make sure that there's a risk measurement management process in place. How much surplus over minimum I hold is none of their business, nor should they decide what things I should get into or not get into if there is sufficient surplus. They can and should warn me about things I am doing, or seeking approval to do, or at least question those things that might put the company at risk in their opinion.

I see these two processes that the future regulation should focus on: risk measurement and risk management and minimum mostly formulaic RBC structure with reserves review and by a valuation actuary. Valuation actuaries, I think, are very, very critical. You find some people saying that the whole system has collapsed and formulaic requirements are old fashioned. I say why don't you be honest and say your real goal is to reduce your reserves because you already are obligated to provide an appropriate amount of reserves. So it can only be one piece that really must be failing, and that is you want to lower your reserves. But that's my opinion. Maybe no one agrees with me.

I think actuaries should not just spend time dealing with the actual rules. If you seek out the truth or the right, you're always going to move in the right direction. Seeking out the truth is what I think actuaries are all about.

MR. ARMAND DE PALO: One of the issues you raised is risk, and that answers a very important question that I've been trying to deal with. There's risk that's actuarial risk, and there's risk to the liabilities. But then there's the generalized risk of the company, which many times the actuary's not totally privy to. There are the external risks that are even beyond the company, that affect the whole industry. There's a movement toward risk analysis. It started with banks, when they began having risk committees.

What they looked at with risk is nothing like the risks in the insurance industry. It's not applicable at all to take bank concepts and bring them over to insurance. But the need to do risk analysis is the same, and you're seeing this from the liquidity regulation. (I apologize to everyone because I wrote the New York regulation that you're all going to get stuck with.) But if you look at it, it says that the chief financial officer will do the risk analysis. You have the actuary sitting with a pile of liabilities and his pile of assets. He's doing cash-flow testing. There needs to be a way to have an integrated team (and we haven't really done this in the industry) of the actuary and other financial responsible parties working together. The actuary and those other financial parties must be a direct part of management with clear communication to the board. I think that communication to the board is a part of it. If you just do the actuary work by itself, you can do all your work correctly and the company can still blow up because something that you might claim is not your responsibility can sink the company. We haven't gotten there yet, but someplace along the line we need to do more in this area.

MR. REISKYTL: I couldn't agree more. And if I implied that the actuary was solely responsible, that was unintended. I was only suggesting that the actuary contribute to the discussion. If my CEO wants to know what risks we have on litigation, he really doesn't care what my opinion is. I could go down the line. There are areas where we can collectively bring the ideas together. I was trying to talk in general terms for the actuaries in this room. They have an opportunity to, perhaps, help shape the future direction of risk measurement and review.

MR. TOM BICKERSTAFF: I agree with what you said in terms of risk analysis, and I think that's the name of the game more so than anything else. I tend to focus on it more than anything else, and I'm not a regulator per se. I work for a consulting firm and deal with the clients of state insurance departments. I feel as if I wear the regulator's hat. My job is probably 90% Actuarial Opinion Memorandum (AOM) review as part of the financial conditions and the nature of the work that I do. I tend to be very disappointed in my review of AOM when there is very little in the way of risk analysis of various products that I pitch. I think that's a glaring deficiency in AOM. It needs to be overcome. As I write the examination reports now, and I put an appendix together on the AOM review, and my examination of the AOM documents, I'm throwing the book at actuaries who do not include in the section all of the risks attendant with the various products.