RECORD, Volume 29, No. 2*

Spring Meeting, Vancouver, B.C.
June 23–June 25, 2003

Session 117PD
Health Valuation Issues: Nontraditional Health Products

Track: Health

Moderator: DARRELL D. KNAPP
Panelists: MARK E. BILLINGSLEY
MICHAEL R. MCLEAN

Summary: This session provides an overview of industry approaches to valuing the liabilities of nontraditional health products such as specific and employer stop loss; provider excess; and critical illness. Liabilities for losses that have been incurred but not reported and for losses that have been reported but not paid are examined. These liabilities are considered from both insurer and reinsurer perspectives. Attendees gain a better understanding of nontraditional health valuation methods.

MR. DARRELL D. KNAPP: We're going to go through a review of basic principles. Since we're talking about nontraditional products, all of them are pretty similar, and there's not that much difference in the principles when we get to the products. The difference is in the specifics of the products and the application.

Mark Billingsley, chief actuary for United Teachers Associates, is going to discuss individual products. He's going to spend a lot of time on critical illness and a little bit of time on Medicare Supplement. Mark has served as chief actuary for United Teachers for a couple of years, and prior to that he was chief actuary of another insurance company, Pyramid Life, which also offered a number of nontraditional individual products. He's had quite a few years of working with these types of products.

Mike McLean will then talk about stop-loss products. Mike is the president and owner of Medical Risk Managers, a stop-loss managing general underwriter (MGU) who has profitably underwritten over $1 billion of stop loss over the last 15 years. He may be one of the only people to have figured out how to make it work and

make money. He'll have a lot of insight on some of the particular valuation issues to be dealt with there.

First, let's discuss the basic principles. As an insurance company, we make a promise. We take money in from policyholders (our customers), and we make a promise that when they have claims later on down the road, we're going to have money set aside to pay those claims. And we will pay those claims. That's a very important promise for us to keep. The idea that the insurance company will be there when it's needed is one of the linchpins of the American financial services industry. The failure to keep that promise would be cataclysmic.

If any prefunding is involved, policy reserves need to be established. If I take money now for claims that I'm expecting to pay years later, then prefunding is involved. That's especially true on the products that Mark is going to talk about. If something changes in the environment, for instance costs go up or we realize we made a mistake at pricing, and that promise becomes in doubt, then we need to set up a premium deficiency reserve to assure that we have the money set aside to keep that promise, even if we didn't get it out of prefunding. This adds to the surety of the promise and provides valid information to the policyholder regarding our ability to meet that promise.

There are basic principles as we look at valuation issues. We have to step back and think about the goals of the various accounting mechanisms. We generally deal with two separate accounting mechanisms. We'll talk primarily on statutory today, but we'll talk a little bit about GAAP also. The purpose of the statutory statement is to assure that valid assets exist that give reasonable assurance that the contractual obligations will be met. The second thing is that the assumptions used in developing liabilities are supposed to reflect moderately adverse development, so that there's some assurance that even if slightly bad things happen, we can still meet and keep that promise.

The GAAP principles are a little different. The GAAP principles look at producing level earnings over the life of the contract. That leads to some of the deferred acquisition cost (DAC) concepts on unlevel expenses. For example, if I pay really high commissions in the first year, and if I want to levelize those earnings over the life of the contract or in the first five years, then I need to set up an asset that I'll draw down on in the future when I won't be paying those commissions. That asset, from a statutory point of view, is not a valid asset because it's money that I've already paid out. It's not a valid asset that I can use to pay policyholders in the future. But for GAAP, it is necessary in order to levelize earnings over the life of the product.

The last thing regarding basic principles is a linchpin of actuarial mathematics. The basic liability in almost all cases is the present value of future claim expenses less the present value of future net premiums. Those are basically the expenses we have to pay out versus net premiums. That's even true on current period stuff. Mike

will get into that on stop loss, where, even inside a year, you take in premium on a monthly basis and your claims don't flow out on a regular basis, you still have this basic concept of the liability. The formula is valid both for claim reserves and policy reserves. As part of being a basic principle, we think the formula is valid for all products that we're dealing with. We need to keep these principles in the back of our minds as we're listening to the presentations. You'll see some repeating themes that will put the big picture into perspective.

MR. MARK BILLINGSLEY: Critical illness insurance is actually fairly broad and covers a variety of types of products. I will comment on a few items with respect to Medicare Supplement and some other ancillary health products, and on the particular valuation issues that we have with respect to those. We're going to talk briefly about the types of policies and then talk about the reserving issues with respect to each one of those types of policies. Then we'll talk about the other health plans. There are also Medicare+Choice (M+C) plans that may need to be reserved differently. There are also state variations. Wisconsin, for example, has its own set of plans that are outside the standardized plans, and you probably need to consider them separately.

Going back to the Medicare Supplement, again, there are a few states that require issue-age pricing. You're going to need to set up contract reserves for those states. Florida, Georgia, Idaho and Missouri are the ones that come to mind that require issue-age pricing. One of the considerations with respect to that is, at what level do you do the aggregation with respect to the offset of using net unearned premium reserves versus gross unearned premium reserves? Again, that's just something for you to think about. Make sure that you're comfortable with the reserving methodology that's being used at your company.

Let's talk about other specialty products. Hospital indemnity products don't tend to have a lot of trend to them. The reserving is fairly static and fairly routine, if you can identify the appropriate claim-cost basis for them. Again, morbidity basis is probably one of the trickier aspects of identifying the contract reserves on these policies. As far as disability income, I believe they're working on updating the disability claim-cost table. It's considered adequate for various durations, but recent durations are very susceptible to influences such as unemployment rates. Disability income becomes fairly tricky to reserve, and, again, the claim reserve in particular needs to be watched fairly closely for short-duration disabilities.

Since there have been a number of different valuation sessions on long-term-care insurance, I'm not going to talk extensively about that other than to observe that the valuation considerations for this are under consideration. I believe the NAIC Life & Health Task Force is currently working on some new approaches to reserving these products. If you're in that market, I would encourage you to participate in

that process as much as possible so that the result is reasonable and something that the industry can deal with.

As I mentioned, the premium rating basis varies by state, particularly with respect to Medicare Supplement plans. There are others that have some variations as well. There is not a standard table for valuation purposes. It's curious to me that there has not been a valuation basis established for Medicare Supplement plans. We've had standardized plans around for 11 years. You would think that the industry would establish some standardized tables for valuation purposes for these plans. I have some theories on why they haven't been developed but no firm idea of why that is. You're generally going to be working with the original claim-cost assumptions used in pricing and adjusting for those.

One important aspect with respect to a lot of these products is that you need to consider how frequently you update the morbidity basis. Medicare Supplement, for example, has a fairly significant annual trend, anywhere from 6 percent to 12 percent, maybe even higher than that. You need to consider how often you update your morbidity basis and how you do that. There are different methodologies you can use. One is to do a layering of each increase in benefits due to increases in Medicare program benefits, but also with respect to cost inflation, utilization and cost-shifting. This can create additional layers at each new attained age. Another approach that has been used is to update the entire table. When you do that, you will create a surge in your active life calculation, but it's by far the easiest approach and something that may not send your information technology department running. The transition to the valuation on an updated basis is probably as important as considering what morbidity basis you want to use.

MR. MICHAEL R. MCLEAN: Why did the dominant stop-loss insurers of the 1990s disappear? The obvious answer is easy. They weren't having any fun. Their loss ratios were bad. But there's more to it than that. When you're looking at extinctions, you want to go through the fossil records. I pulled out some old loss-ratio surveys that I had done, and I looked at the summary of the changes in the loss ratios. I polled several risk-bearing carriers and several reinsurers. They wrote close to $2 billion worth of stop loss back when the market was only maybe $4 billion or $4.5 billion, if that. So, they had a major portion of the market.

I didn't poll the MGUs because they would have lied to me anyway. They would have said that they're all doing great. I asked everyone about changes in loss ratios because people would tell me that. They could be going from 50 percent to 60 percent or from 150 percent to 160 percent, and they didn't have to be embarrassed about their changes. So they were fairly forthcoming. I didn't ask the fronting carriers because back in 1997 I'm not sure the fronting carrier taking 5 percent of the risk would have even known what his loss ratio was. He didn't care. It didn't matter. He only had 5 percent of the risk. The interesting thing is that something different is happening to the risk-bearing carriers and to the reinsurers. If you think after the fact—this phenomena was going on for three surveys I was

looking at even for previous time periods—it made sense to me that the reinsurers weren't having any fun, and, as a matter of fact, they virtually all got out of business. Yet the carriers are still around.

Let's think. What are some theories for the extinctions of the reinsurers in the late 1990s? One that's already been talked about here is that the expense levels were too high. Certainly in the MGU model I've seen instances where the permissible loss ratio was actually under 50 percent. You'd have to take your claims and then double them. Of course, the MGUs would say that it's all in there. It's in the expenses. It was in the manual rate, and then they sold it at 50 percent of the manual rate to be competitive. The expenses were quite high. They're probably about five points higher in this model back then than they were on the direct model. The captive model would be the MGU. The direct would be the Hartfords and the Safecos of the world, although even they were using some MGUs. The captives would be the Aetnas, Cignas and Uniteds of the world. Then you have the Blue Crosses.

Actually as you go down this list, the expenses that are priced for are less. I've seen several Blue Cross and Blue Shield organizations. When you ask them what their permissible loss ratio is, they look at you funny. They take all of their expenses, and they add it into the admin fees for their ASO. They price to 100 percent on their stop loss. They're not even adding premium taxes in. When you ask, "Do you have any problems with your stop loss?" "No, we're very competitive. We're fine." Well, yes, you're pricing to 100 percent. And they are using a percentage-of-claims approach, which is not the right way to do it. In any event, the expenses as you go up this list got higher, and, not surprisingly in retrospect, the loss ratios to net premium as you go up this list also got higher.

What's another theory? This one probably hasn't been talked about too much. The risk-bearing carriers had their own manuals that they'd developed over the years. They were less reliant on the consulting firms' manuals than the reinsurers. I'm not saying that the consultants did anything wrong. It's just that there was a lack of awareness of the impact of the changes in somebody else's manual. I was an expert witness on some cases. The MGU was at 70 percent of Tillinghast's manual this year. The Tillinghast manual went way down. They were still 70 percent next year because that's the model they were doing. Everyone wonders in retrospect why the loss ratios went to hell. The massive deterioration in the loss ratios coincided exactly with the large reductions in the consulting firms' manual rates, and yet it's not that they did anything wrong. It's just that the major carriers, the risk-bearing carriers, were not aware in detail of the impact of the changes in their manual upon their block in total and individual cases. There was a lack of awareness of that. In fact, the reinsurers themselves and the MGUS weren't monitoring that. The answer was, "Well, I'm 70 percent of Tillinghast's manual."

Another theory for the extinction of the reinsurers is that the interests weren't aligned. This was certainly true. The fronting carriers would take a 5-percent fee

and maybe 5 percent of the risk. They'd get into trouble if the loss ratios came in around a couple hundred percent. They didn't care much about that. They took the 5-percent fronting fee, put it into their pocket, called it profit, and didn't think that they had to spend that money to go monitor their agents. The MGUs were paid a percentage of premiums with no fees at risk. Earlier, when Darrell introduced me, he said that we'd figured out a way to make money. The way to make money in the late 1990s was, for the most part, not to take risk, but some people did make money then.

My favorite one I'd like to talk about is PPO pricing differentiation. In one minute I can cover the strategic drivers of stop loss. It's really pretty simple. It's 92 percent specific and 8 percent aggregate. People can talk about aggregate, but that's not where all the action is. The action is in large claims. Within large claims—if you're talking really large claims, a $200,000 deductible—it's 91 percent hospital inpatient. The bottom line is all we care about is large claims. For high deductibles, all we really care about is hospital inpatient. Even at a relatively low $50,000 deductible, it's still a majority of those stop-loss liabilities coming from hospital inpatient. The other thing going on is that the large claims are coming from relatively few tertiary-care hospitals.

If you're at a community hospital, they'll do one of three things. They'll cure you, kill you or ship you off to someplace that can fix you. We know this for a fact because we've looked at a lot of the hospital discharge database across the country. Sometimes one hospital is where all your large claims are coming from. Not only is it large claims, hospital inpatient, and just a few hospitals, but your entire liability for stop loss is boiling down to an asterisk at one hospital—in that location, anyway—and that's the outlier provision and whether or not they have an outlier provision. Your entire liability is determined by one little phrase in that one hospital contract.

Because we think that PPOs are important, we've analyzed about 300,000 shock claims from 450 networks, and this represents about $17 billion worth of essentially stop-loss claims, or the claims that would have been stop-loss claims. These are not our claims, by the way. We'd have to have some impressively high loss ratios to have actually underwritten $17 billion in claims. We also have hospital discharge data. We could go in and say that of all the hospitals in Rockford, Rockford Memorial Hospital is where 76.9 percent of all the stop-loss liability in excess of $100,000 occurs. We're pretty sure we know where the important hospitals are. Obviously in using Medicare hospital discharge data, though, you don't tend to pick up the children's hospitals as being very important, which they are.

Our conclusion is, and I've said it before, if you've seen one PPO, you've seen one PPO. The stop-loss liabilities vary dramatically between networks. There's often a tenfold difference in liability within network—at a higher deductible level, anyway. So it's networks, networks, networks. Why do I go through all of that? It's the outliers that destroy the claims. How can your stop-loss liability differ by more than

tenfold? The first thing is that you don't need a tenfold reduction in hospital claim to have a tenfold reduction in stop-loss liability because of reverse leveraging of the fixed deductible. The other thing is that today you can easily see $20,000 a day in claims. There are some hospitals where the average claim is over $35,000 per day. The average is running $20,000 a day. If you have a $25,000 outlier, by brunch the second day they've hit your outlier provision, and the per diem never applied.

Here's an example of reverse leverage trend. If you had a 30-day stay, and it was running at a relatively low $5,000 a day after you got your whopping 20-percent discount after the outlier, your stop-loss liability would be $100,000. If you have a contract with a particular tertiary-care hospital that's only $2,000 a day, then that claim becomes $60,000. Your deductible is still a fixed $50,000. So you have a 60-percent reduction in liability, which is actually very easy to get if you didn't have an outlier. That results in a 90-percent reduction in your stop-loss liability. I mention all this because there is and was a major dichotomy in people's opinions of networks.

The largest stop-loss carriers have noticed positive variances by network and started pricing accordingly. It's not that the biggest guys are necessarily smarter. You stumble across an $8 million block, and it's been running 29-percent loss ratios three years in a row. You start to believe that maybe there's something going on, and you start to price accordingly. The small guys weren't lucky enough to stumble across that, and even if they were, their reinsurer would have said, "No, you can't give more than a 10-percent PPO discount." They never end up writing the really good stuff out there.

Nowadays the reinsurers are acknowledging that maybe something is going on. We don't like to do this, but we'll let you do it. Back then, in the era of the extinctions, the reinsurers were still of the mind-set, as many of the small reinsurers are now, that they all got into trouble when they gave big PPO discounts; they shouldn't give more than a 10-percent PPO discount. I'm virtually certain that that's not the correct answer. Most of the MGUs, and most of the reinsurers for that matter, haven't invested in network analysis, and yet all of the big guys have.

In particular, when we were doing the evaluations for Safeco, we had evaluated over 450 networks, and before that with ING and with Manulife. HCC has evaluated over 500 networks. With Lincoln, I don't know the exact number, but before they were bought by Safeco, there were over 300 networks. Sun has evaluated over 800 networks and has been doing so for over 15 years. MBR has evaluated hundreds. There are some other large MGUs that are evaluating just under a hundred. It's not easy. One network can have 4,000 hospitals. You need to know which hospitals are important. But that's just one network, and there are many hundreds of networks out there.

What kind of differentials are we talking about? I'm talking differences in liability, not pricing discounts. But when we were doing it for Safeco, the difference between

an indemnity plan and a good network and higher deductible is that a dollar would turn into less than a quarter. We were giving pretty big discounts, and we've been doing this for a dozen years. Some of our best loss ratios are on blocks that we're giving higher discounts to. Lincoln was actually capping them at 50 percent because they didn't really have to go any higher than that. Sun has differentials in excess of 50 percent. MBR's differential is over 30 percent. Several large MGUs are now over 50 percent.

To the larger MGUs, the reinsurers are begrudgingly saying, "Okay, yes, I guess your loss ratios in Pennsylvania are good. We're going to let you discount something there." What I would say to the reinsurers is that if you're just capacity, you're out there just making somebody stay at 90 percent of Tillinghast's manual and being a tough whatever, doing that and not giving big PPO discounts then you're part of the problem. If you can provide value-added to your clients, whether it's in PPO analysis or showing them some other way, you're part of the solution.

Let's go on to some more theories for the extinctions of the reinsurers in the late 1990s. They were targeting different blocks. The MGUs were almost exclusively going after the third-party administrator (TPA) business, and they ended up getting the smaller average case sizes. In retrospect, the larger cases tended to be more profitable. The direct carriers, like the INGs, the Hartfords and the Safecos, tended to have more broker business. You can't strip a case away from Cigna if you're just going to a TPA. It won't be on Cigna's administration. But the direct carriers—some large blocks with $200 million—specifically target Aetna, Cigna, United and the Blues. Historically, that was a good thing to do, although going forward, I'm sure that the big carriers will find ways to fight back. Then you have the captive carriers. The Aetnas, Cignas, Uniteds and the Blues have been lucrative throughout the whole process.

Now I finally get to the valuation part of the talk here. There's one other thing going on. When you have a change in environment, and you have extinctions going on, there are different ways to adapt. One way to adapt if food becomes scarce is to eat less food. Another way to adapt if claims go up is to reserve less. I say this not really in jest. There are vastly different reserving methodologies going on between the reinsurers and some of the carriers that are out there without reinsurance. A couple of years ago, I surveyed six large carriers and I asked the question: "What is, for specific and for aggregate and in total, the ratio of your reserves to your annualized stop-loss gross premium?" The answer is going to differ depending on deductible size, case size, etc., but we had pretty good consistency for five of the six carriers. The carriers that tend to have reinsurance are all reserving similarly to the way the reinsurers are reserving. But, in particular, one company had slightly lower reserves than the others at 13 percent when the other five were between 39 percent and 50 percent. These assume that you have a 90/10 weighting. Most of them had different numbers for specific and aggregate, but if they just had the total reserves, we assumed that weighting.

Let's talk about the reserving methodology for the typical reinsurer. The majority of the reinsurers that I'm aware of track claim development by policy-effective month. They'll go through and say that for all cases that are effective in January they're going to track that cohort block. Then you come up with your development factors, and then you project the ultimate claims for that cohort. Then you compare these claims, in particular the remaining claims, with your future net unearned premiums, going back to the basic principles that Darrell was talking about. That's how they're going to do the reserves.

Just as an example, take all cases effective in January. Let's say your net earned premiums are $1.1 million a month for that block. After 10 months you might have had paid claims of $4.8 million, and through your history you've determined that your development factor is 40 percent. Your ultimate incurred claims for that cohort are $12 million. Then your reserve is basically just the present value of future claims less present value of future premiums, except the lags aren't long enough to worry about interest, and nobody is making positive interest now anyway. So, in this example you would have $12 million of ultimate incurred claims. You've already seen $4.8 million. So you have $7.2 million of future claims that are going to happen, and yet you get to offset that by your future premiums on that group, which is another two months' worth of premiums. So, $7.2 million minus $2.2 million is $5 million. This is consistent across the industry, as I understand it. Again it's basic actuarial principles. You could ignore interest because it's not going to matter for the interest rates and the time periods we're talking about.

For the most recent policy-effective months, if you just wrote a case December 1, and you want to know what's happening December 31, obviously this is not credible. You could do a couple of things. You could either let your expected profits flow through for that month's worth of incurred claims, or you could just do it at break-even. I've seen both of those. The methodology works as long as you don't have major changes in your development patterns of claims. In particular, if you're a January cohort and if you lost a really large case where you had higher deductibles and longer lags, that might change things. Actually your January cohort does have a longer tail than the others because they tend to be larger cases. They tend to renew on January 1, and you get longer lags there with the higher deductibles.

Again, the reinsured carriers tend to follow the same methodology as the reinsurance companies. They're reinsurers. Now I want to step back a second and compare and contrast that with what I was used to doing on traditional fully insured health-care reserves. Remember that on the fully insured, your premiums and your incurred claims are close to uniformly distributed throughout the year. The paid claims aren't, but your incurred claims are uniformly distributed throughout the year. What we would all do is go in and do our triangles based on the date the claim is incurred and the date the claim is paid. Another way to do it is to do your triangles based on the date the claim is incurred and the date the claim is reported,

which is your true incurred but not reported (IBNR), and add a pending claim liability.

My limited understanding of the Health Insurance Portability and Accountability Act (HIPAA) is that you can't pend claims. I'm always leery of coincidences, but just after HIPAA went into effect everybody saw trend being down. I was thinking: Is this that they're taking their paid claims and their pending claims, and the pending claims aren't there anymore, and now things are looking better? But simply because you can't pend them does not mean that these claims will be denied. These are going to come back because they're real claims. I hope that the drop in trend is real because we have profit-sharing, and that would be good, but I'm not quite sure.

The reserves you would get on a fully insured block are, as you know, two or three months' worth of claims. There are carriers that are using that traditional triangle method for stop loss. We have to talk about how stop loss is different from fully insured medical, and, in particular, how these items impact the reserves. The first thing is that the deductibles are bigger. Instead of being a $100 deductible or a $5 copay, you have a $100,000 deductible. When you do that, you basically increase your total lag time and, therefore, the number of months' reserves. So you're not going to expect two or three months' worth of reserves when you're looking at stop loss.

Another thing that's different is that for fully insured you're indemnifying the employee, but for stop loss you're indemnifying the employer. Things are different. You can do different things to the employer that you just couldn't get away with doing to the employee. In particular, you can have a different contract basis. You could write cases on a 12/12 basis. A lot of people write their first year new business on a 12/12, incurred and paid within the first year. If you're doing it on an incurred basis, claims are incurred uniformly throughout the year. If you're doing things on a 12/12 basis, claims are not necessarily uniformly incurred throughout the year. It depends on what you call your date of incurral, and I'll get to that.

Lasering is also going on. You can't do that to an individual, but you can do it to employer groups. I wrote an article back in 1986 in *Self-insurer* saying that the main difference between stop-loss carriers is not in their contractual provisions, but in their renewal underwriting philosophies. It just took 17 years for me to be right. There are differences in renewal underwriting philosophies out there with lasering. It is, in fact, becoming more prevalent, and the reinsurers like that because you can cut the tail off the claim.

Another thing that goes on that you wouldn't see in fully insured is aggregating specific. Is everyone familiar with what aggregating specific is? You say the premiums would have been $500,000, but instead of dollar-swapping we're going to let you, the employer, self-fund the first $150,000 of stop-loss claims or claims in excess of your regular deductible. To the extent that you're switching more to

aggregating specific, that's cutting out the first claims from your liability, and you're getting the claims that are out longer tail. That would increase the percentage of gross premium for your reserves.

Normally we're on a reimbursement basis, but there's advance funding going on where the TPA doesn't actually pay the claim before he gets reimbursed. The real problem with using triangles for stop loss is the question: When is your date of incurral? Is it your date of accident or diagnosis? LTD is easy. He goes in and says he got hit by a car on this date. I'm going to worry about whenever he satisfies his waiting period, but he's my claim for the duration. That's very different than fully insured. He's my claim until the renewal anyway, and for stop loss, well, he's my claim only if the TPA pays the claim before I can laser or cancel the case or do whatever nasty thing. So, stop loss is very different. In particular, it has to do with when you become contractually liable. Or is it the date of service? Is that when you would use your triangle? Or you could argue, "Why do I have to do things for expenses? They haven't even satisfied their deductible yet. So let's make my incurral date when the deductible is satisfied."

Some argue that they don't become contractually liable until the TPA pays the claim. This is the part that messes up the uniform distribution of incurred claims. Let's give an example. You write General Motors December 1; you write them at $1 million deductible; and it's $24 million of premium. You collect $2 million of premium in December. If you were using the traditional triangle approach and saying the date the TPA paid the claim, it's virtually impossible to have a person incur $1million of expenses, have the hospital bill that and have the TPA pay that by December 31. If you were using this methodology, you would have collected $2 million of premium, taken out your expenses and said that you were really profitable. There are large stop-loss carriers that are doing that.

How does the contract basis impact incurral date? Your reserves should be different if you're on a 12/15 basis than if you're on a 12/12 basis. Again, what about aggregating specific? How does that impact your date of incurral? Do you not worry about those first few claims that were self-funded by the employer? The problem with using the date the TPA pays the claim is not a minor problem. There are a billion dollars of annualized stop-loss premium out there that I'm aware of where this is what the reserving methodology is. It's public information. You can look at the annual statements and see what's going on. The problem is that the premiums are recognized uniformly over the year, but your claims are not. For instance, in that General Motors example, you didn't have any incurred claims in December.

There is another problem that is not minor. If you're assuming that you're going to be an ongoing business and not cancel everything as of December 31, on that methodology, your reserves— basically 10 percent of your gross premium or something on that magnitude—plus your future net premiums are going to be less than your future claims. This has to violate some basic actuarial principle. That's if you're assuming that you're going to be an ongoing business. You could argue that

you're going to hold a canceled case reserve. Then I think you would be adequate doing it that way.

If you could cancel every single case December 31 by using the date the TPA paid the claim, then that would be correct. I don't think that's the right thing to hold. It wouldn't make sense to hold that minimal reserve and simultaneously be holding a DAC, assuming that you're going to be able to collect that in future premiums. Yet there are people who do that. They're holding these minimal reserves and holding a DAC. That's clearly inconsistent and inappropriate.

The next problem is that you basically have an inappropriate recognition of your profit stream due to the timing mismatch of your premiums and claims. In that example with General Motors, you have to go back and say that you need an unearned premium reserve for that $2 million. You can't just book that all as profit. You either need to add an unearned premium reserve, if you're going to use this triangle methodology that I wouldn't recommend using anyway, or you need to have a deficiency reserve again because your present value of future premiums isn't enough to cover future claims, so you have a deficiency reserve. If you're going to use the triangle methodology, you have to modify it because you need to raise the reserves quite a bit.

How can you have a billion dollars of stop-loss premium doing this? It boils down to the claim reserve validation. Take General Motors written December 1 again. You're holding minimal reserves as of December 31 on that case. It's written on a 12/12 basis. Your minimal reserves are here. When someone comes along and says let's do the Schedule H and see what the actual claims were, I didn't have any claims incurred. My date of incurral is when the TPA paid the claim. He didn't pay any claims in December. My run-out was zero for that. So, I'm over-reserved. Even though I'm holding the single digit percentage of gross premium, I must be over-reserved. The bottom line is that the current schedules are inadequate for stop-loss purposes if you're using the incurral date as a TPA-paid date. This is my opinion.

You can look at annual statements of some carriers. It will get a little muddied if they have a block of business that's LTD where the reserves are 300 percent of the annualized premium. But if they don't have much LTD, and a lot of people just have stop loss, it's pretty easy to see what's going on. Only the oligopolies have the fully insured stop loss anymore. The bottom line is that there's a very steep, unlevel playing field. Some people are playing by different rules than others. It tends to be entities that don't have reinsurance because they don't have anyone looking over their shoulders.

What's the solution to leveling the playing field? One solution would be that all the reinsurers cut their reserves by a factor of three, but I don't think that's the right solution. Another solution would be to promulgate some form of regulations that specifically address appropriate stop-loss reserve levels. Stop loss is a different creature. You can argue that if the General Motors case canceled December 31, you

would have $1.4 million of profits ($2 million less expenses). It is a different creature. I'm not aware of anyone having actually addressed stop-loss reserves in particular. One way to get it done fairly easily would be go to the NAIC, because they hate stop loss in general because self-funded entities can hide behind ERISA and don't have to pay any attention to mandated benefits. They don't have to pay any premium taxes for the most part, and that's why they're not trying to get back at us through assessments. You could get it done with some kind of standards board within the Academy. You could get it done within accounting firms. I've seen instances where one company bought another block of business. The reserves were vastly different because of the methodologies. They had the same auditing firm signing off on both of the entities. One was three or four times the other level. If the Big Five, or whoever is still left, want to remain the Big Five, they should look into things like that. There are also some GAAP issues on income being reported. There has to be something wrong if you were to go out and report that $2 million in profit for General Motors.

MR. WILLIAM LANE: Mike, I'd argue that codification has answered your question. Under codification, the deficiency reserves are required where the present value of future premium plus the reserve is less than the present value of future claims, and you have to treat it as an ongoing basis unless you're intentionally trying to get out of the block, which these carriers are not. They are probably in violation of the statutory rules.

MR. MCLEAN: I agree with you, and that's why I'm bringing it up. Clearly you should be holding a deficiency reserve when your future premiums are inadequate compared to your claims. It's just that some of these things have been going on for over 20 years, and nobody has been picking it up. I don't want to point fingers and say who is doing it because they'll come back and sue me, but it is public information. If you want to spend $280, I'll give a plug for something called *Lifedata Reports*. It gives you two-page summaries of a whole bunch of companies. It's easy to see who's doing what, unless it's all muddied up with LTD. If a big stop-loss carrier goes out and buys a large LTD block, you might say that they're trying to hide things. But I agree with you that a deficiency reserve is needed.

MR. KNAPP: Sometimes stop-loss carriers—these are primarily insurers that have a stop-loss block of business—take the reserve approach that's more of a seriatim type. They try to make an analysis on each specific large claim or try to pick up what the actual large claims are out there. But, again, without supplementing that with some type of loss ratio in the early durations, they can get into the same problem that Mike was mentioning.

MR. MCLEAN: We used to look at doing it on a seriatim basis. Some people do that for aggregate. You can see where you're tracking each month, when you know what part of the cycle you're in and whether none of your claims are going to hit or all your claims are going to hit aggregate limits. It's a good thing to do there. We don't tend to do that on specific stop loss. If you have a very small block, it's nice to

know if you have pending septuplets out there because it's going to kill your loss ratio. On a large block of hundreds of millions of dollars, however, I don't necessarily see the need to do that. I prefer the traditional method, policy-effective month. I suppose you could combine the two, but claims that you're aware of would have to fall into the pended claims category.