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Session 6PD

Understanding The Guaranteed Renewable Aspect of Long-Term-Care Insurance

Track: Long-Term Care

Moderator: STEVE P. SPERKA

Panelists: MIKE T. RAUCH
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Summary: As experience emerges on long-term care insurance (LTCI) contracts, companies may need to adjust the premium rates on in-force contracts to reflect deviations from initial pricing assumptions. Panelists discuss pricing considerations with post-issue premium rate changes such as:

- *The impact of state regulation and the 2000 NAIC model regulation on premium rate changes*
- *Challenges and technical considerations in determining and implementing premium changes*
- *Implications of product design features like rate guarantees and limited-pay contracts*

MR. STEVE P. SPERKA: One of the challenges that long-term care pricing actuaries face is the following: We don't really have credible experience yet, and we worry when the 60-year-old that's buying the product today turns 80, what's the experience going to look like?

Now, one of the things we have to protect ourselves from experience changes is that it's a guaranteed renewable product. If experience goes bad, we can change the premiums.

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Well, I've never really thought through the idea of, "How does it work?" I can change the rates, but to what extent? What are the rules, or what type of regulatory concerns, come up? Until you really think that through, it's hard to get a good feel for what that risk is and how much you can do through a rate increase.

I tried to do some research and find what's out there. Is there something written that describes how rate increases work? What are the rules? I went to the SOA Web site and did some searching. I actually found an article, and I was amazed at how the article identified the issues that we face today.

The first paragraph reads:

The guaranteed renewable premium policy is a unique new instrument in the array of insurance mechanisms available to the accident and sickness insurance industry. It can be expected to develop its own unique set of problems, and it's been the writer's impression that considerable vagueness exists within the industry as to the interpretation that is given to the premium adjustment provision.

More than one company has entered this new field, relying confidently on its right to revise rates, while at the same time giving little thought as to what approach it planned to take should a revision of rates become actually necessary.

I was amazed how topical these statements were, particularly considering the article was written in 1960. The purpose of today's presentation is to discuss some of these topics and have us think through that whole concept.

So let me introduce the panel. Michael Rauch is from GE Financial, and he's going to talk about issues and considerations related to rate increases.

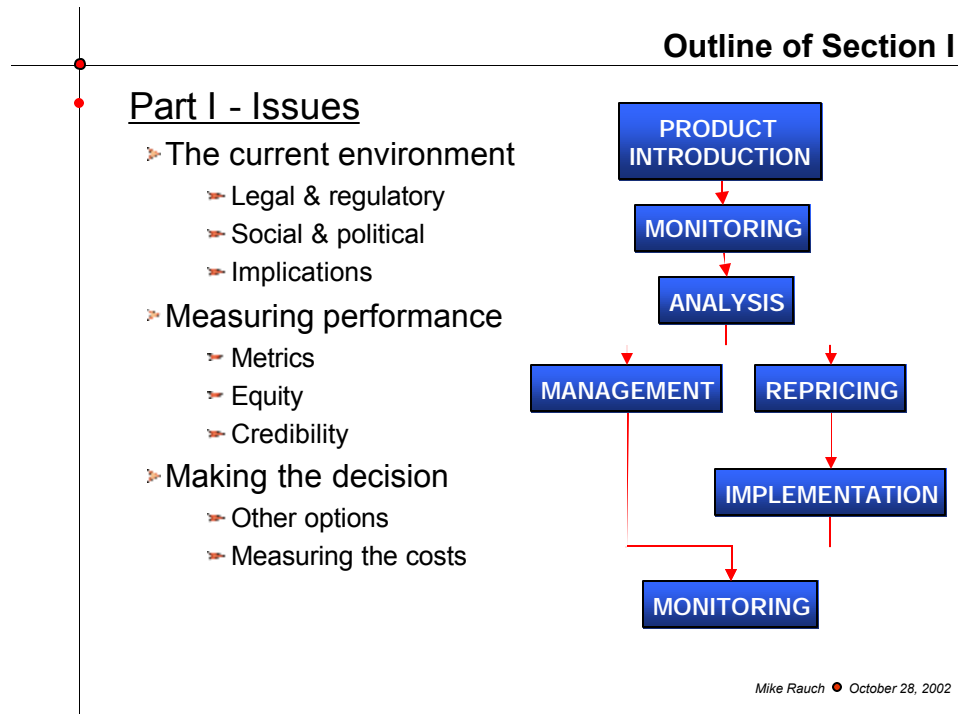
Al Schmitz from Milliman USA is going to actually take us through a case study that looks at some methods of calculating rate increases and valuation considerations. And I challenge any presentation in this entire meeting to have more charts and graphs than Al's going to bring to us this morning.

Then, I'm going to take an extension of what Al talked about and apply it in the context of the 2000 NAIC model regulation. With that, I'll turn it over to Mike.

MR. MIKE T. RAUCH: I'm going to start off by talking about the considerations before you do a rate increase and maybe why you shouldn't do a rate increase; then Steve and Al will discuss some of the more technical issues relating to rate increases.

This first slide is how I view the process, which is a continuous loop from product introduction through measurement and into active management (Figure 1).

Figure 1



When you start actually getting into active management, you need to make some decisions about whether you're going to increase rates or manage the product in another way to try and keep your profitability up in the event that things don't go well. Obviously, your first hope is that things will go well.

Current Rate Increase Environment

I'm going to talk about three specific, different areas here. One is the current environment around rate increases, both politically and in a regulatory sense; a little bit about measuring performance and how you should be measuring performance; and then some of the considerations that go into finally making a decision once you've determined that your performance isn't going as well as you'd like it to.

Legal and Regulatory. The first part of current environment is legal and regulatory, and it's fairly well established at this point that we, as long-term care writers, do have the right to raise rates in most cases. Certainly there are instances where agents have over-promised, or where marketing materials have said things that may have led buyers to believe that the rates won't be raised, and those cause problems on a case-by-case basis. But for the most part, there's a fairly long history of raising rates.

There have been some very large and public lawsuits; but for the most part, if experience has deteriorated quite a bit by the time a company actually asked for a rate increase, they have been successful in obtaining the rate increases.

There have been lawsuits, and lawsuits are something that any large carrier can probably expect in most cases. It's a question of how big the lawsuit is and how well grounded it is.

And if you're a large company, you know you can expect even more of those. Whether they're just nuisance lawsuits or a little more substantial varies, depending on how you sold the product and what kind of marketing materials you had at the time.

Sociopolitical. The social and political environment is probably a little less friendly, depending on where you are.

Generally when a company has raised rates there is negative local media coverage; and depending on the size of the company, there can be negative national coverage. It usually passes fairly quickly. When a large company has to do an across-the-board rate increase on a lot of policies, it is going to have a PR impact. This is one of the things you need to think about before you decide to implement a rate increase.

I don't think the market would have developed at all if you had to guarantee the rates for the lifetime of the policy, simply because we didn't have enough information to guarantee the price. Now that the experience is starting to develop, there's been more of an acceptance that the experience is still developing. As a result, we see things like the new guidelines, which are designed to minimize the amount of rate increases while giving insurers a little more freedom to price the product.

Unfortunately, some older products were sold in an environment where rate increases were assumed. They were still priced to be level, but it was always assumed that you could increase rates fairly easily when experience turned bad. You now have an environment where it's viewed as a very bad thing to do.

You need to show a really good reason why the experience is different than originally assumed.

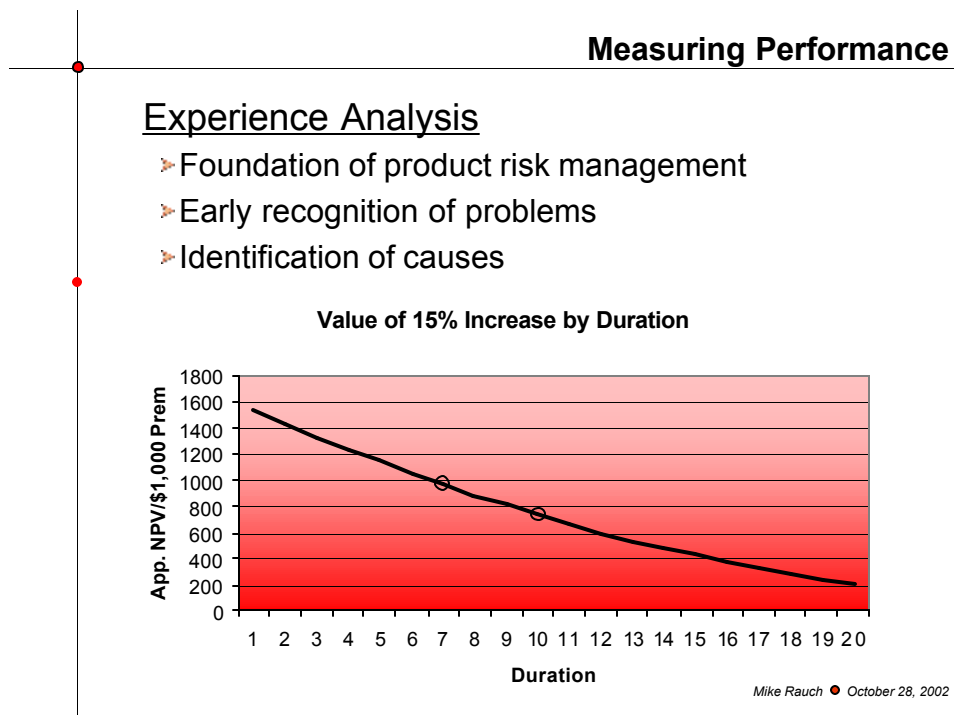
Implications. That external environment may mean that you will not be able to increase rates. If you have business you badly mispriced, you may be able to do it legally, but there are a lot of implications: publicity and regulatory implications. And it's not going to be an easy road if you haven't really crossed all your t's and dotted your i's. Following the rate increases, there will need to be an emphasis on risk management and on very careful compliance and regulatory control in your marketing and in your sales.

It also forces us to understand the product on a very detailed level. Where is the bad experience coming from? Recognize that: 1) You will need to be able to justify the rate increase, and 2) You need to be able to take other options in the event that you're unable to get a rate increase because of either PR reasons or regulatory reasons.

Measuring Performance

Experience Analysis. This graph (Figure 2) is kind of schematic; but essentially, as time goes by, a rate increase becomes less and less valuable, for obvious reasons. You have fewer policyholders, and you just can't get as much in additional premiums. After 18 or 19 years, rates need to triple to make up for lost time. When half your people are on claim and generally on waiver of premium, you're not going to get much additional premium.

Figure 2



So it's important to be able to identify issues up front and to have a very robust experience analysis system. To the extent that you can, get experience from intercompany studies or other companies. And make sure that you can identify, well in advance, what the problems are. If you don't and you wait 10 years or 12 years, the value of that rate increase just isn't going to make up for what you've lost.

I think there's going to be a little discussion later around the extent to which you can make up for earlier losses; but the general view is that you can't.

Cause Identification. Cause identification also allows you to do other things. If you can't do a rate increase, or when you don't want to do a rate increase because it's too late, there are other areas you can focus on. You can focus on claims management: You can focus on expense management, conversion programs, upgrade programs and additional sales. There are a lot of different things that you can do in order to rectify the situation without resorting to a rate increase.

In a lot of cases, rate increases should be your last choice. But if you don't have any information about why your claims are higher than they should be, then you have very little opportunity to go back and try to fix the root cause. You need to just do these blanket, across-the-board rate increases.

Good Structure. I list here a good structure for an experience database. It's not all required. Many of these items are nice to have. Essentially what this breaks down into is, the better detail you have, the better off you are.

Obviously with a small block, not everything's going to be credible; but the better information you have, the better off you are. And if you see that your problem is, for example, arising simply from one particular area, then you can drill down into that area. Rather than raising rates on everyone, you can, for example, focus on fraudulent claims or focus on care management—those sorts of things—to minimize the problem without impacting the entire block.

Metrics. The next topic is metrics, which is how you measure the performance of your policies.

Loss ratio is the minimum. It tends to be what regulators focus on. To some extent they'll look at things like internal rate of return (IRR) and—very rarely—net present value. At a minimum, you need to be able to project IRR.

And given the lack of credibility, a lot of times you need to use policies that aren't necessarily in the block that you are asking for a rate increase on.

You can use those other pieces of your business to try not to justify the rate increase, per se, but to at least make a guess about where your experience is going. If I see that everybody in Missouri is going up 100 percent, and my

noncredible Kansas experience is going up 5 percent, you want to make sure that Kansas is OK. Generally you're going to see fairly close experience between two areas that are typically the same.

So if you sell heavily in a particular state and another one not so heavily, it's good to consider the entire block as a whole and to extrapolate. That kind of ties in to experience analysis, too, in that you really need to know the root cause. If it's a rural versus an urban issue, then there may be a good reason why one state is performing differently from another one; but without knowing that, you're left to analyze them independently.

Some of the other metrics that you often see people focus on internally:

- Return on equity is a popular one for those of you who are part of a larger corporation, but it's not a very good one from an actuary's point of view, simply because it changes so much over time.
- Internal rate of return, which everybody's familiar with.
- Embedded value, net present value, have the discount rate problems. You've got to choose what you want to discount at, but it's another fairly good metric that gives you a real sense of what's going on, as opposed to some of the return-based measures.

With risk-adjusted return on equity, you allocate an economic capital to the block and adjust your return based on the risk of the block. Right now most people are allocating capital probably along NAIC guidelines, which has a certain amount of sense to it. But if you've got a large block, it also makes sense to look at what you think the risk of the block really is. And if you think those capital guidelines are too high, you might want to consider that, because economically, to the firm, you may be showing a return of 5 percent, but if you can really justify that it's not that risky, then you can have a much higher return.

The metrics that are of interest to you may not be the ones of interest to the regulator. You may be in a position in which you can't get a rate increase, because your loss ratios look OK, where your other metrics aren't looking that good. Or you may be in the opposite position, where your loss ratios are looking very bad, but economically, you still feel you're doing OK. Again, that depends on your reserving practices, the slope of claims and all sorts of different things.

Equity Considerations. One of the things that comes up a lot in the rate increase process is how you're treating one policyholder versus another.

In general, states have encouraged rate actions to take place on individual blocks. There have been a few states where companies have gone for rate increases, and the response has been, "Well, let me see how your whole business is doing. Let me see every policy that you've sold in my state." Some states are more lenient than

others. Some regulators take a very consumer-protectionist view, and some take a less protectionist view.

To the best of my knowledge I don't think any companies have been successful in bringing in other blocks of business in the consideration, but I could be wrong about that. There are places where you need to think about that. If you've sold policies that didn't work out so well, but your new policies are doing fine—as many companies did 10 years ago—you're in a difficult position when you go back and say, "You know, I want a rate increase on these guys, even though I'm making 20 percent on the ones I just sold."

At the same time, there's the flip side of that, which is, if you don't go for a rate increase on the older block, then a newer block is essentially subsidizing the older block.

Limited-payment Plans. Limited-payment plans raise a whole set of issues in how you treat it, and even how the contract is worded. Some of the contracts guarantee the premiums after the initial payment period.

There is at least one contract where they can reinstate premiums, and I think there are some contracts that could reduce benefits. But for the most part, that's probably even more of a political morass than raising rates on a typical block. You definitely need to put a lot of thought into what you're going to do if you ever need to raise rates on a limited-pay plan. They're generally sold under the same policy form as the rest of the policies. So you've got an equity or subsidization issue going on there if you raise rates on everybody but limited-pay people. I think approaches to that vary by insurer.

There are a couple ways you can do it:

Padding the limited-pay people a little extra up front to take into account the guarantee and, if you can get away with it, actually selling it as a separate risk class, or a different policy form, take care of that issue entirely, although it also leaves you essentially issuing a guaranteed rate product. So if you sell a lot of it, there may be concerns.

Typically companies are selling small amounts. I know there are some carriers that sell an awful lot of it through brokerage channels; but typically it's a fairly small portion of an insurer's policies, so from the actual economic standpoint, it's not as big of an issue.

Credibility. I'm not sure that that I can teach you anything about credibility. Obviously it's a product for which you get very few claims in the first few years. In reference to the earlier graph, that's unfortunate, because basically by the time you have credible data, you've lost 30 percent of your premium stream. So rate increases are a lot less effective at that point. Most of the rate increases have been

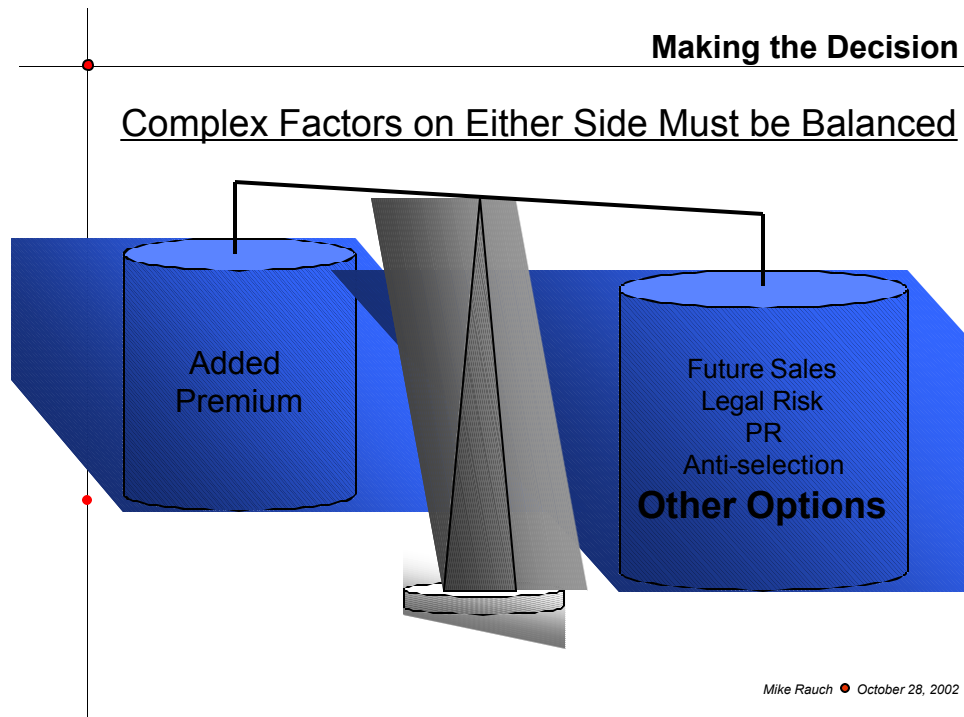
on these earlier blocks, often because of lapse assumptions or investment yields, even though those aren't necessarily explicitly included in the reasons for raising rates.

There is a tradeoff between the cost of waiting versus lack of credibility, and it again goes back to the experience analysis and trying to use other blocks of business to project how the block of business that you're looking at is going to do. It's good to have lots of data obviously, but it's not always there. Typically it takes five years-plus to emerge.

Weighing the Costs, Making the Call

This chart is where I basically exhort everybody to not raise rates (Figure 3). You really need to consider a balance. When you calculate how much extra premium you're going to get from a rate increase, it turns out to be a smaller number than you might think.

Figure 3



When you start adding up the other costs involved in a rate increase, you find out pretty quickly that it's not going to save you from bankruptcy. There's a real question as to how prudent it is to go for a rate increase in that sort of case.

What you need to do to make this decision is come up with an estimate of what you're going to lose.

Legal. The first thing is legal costs. You're almost certain to face a few nuisance lawsuits, if nothing else. In some cases, if you had poor sales practices, you're likely to face real lawsuits where you may well lose the rate increase. In some states, you may end up with punitive damages. Obviously that's not a foregone conclusion, but it's something that you should weigh and give proper importance.

Implementation. There are implementation costs. There's the cost of goodwill with agents and brokers. A lot of carriers have older policies underperforming, with newer policies doing very well. And while there is something to be said for not subsidizing your older policies with your newer policies, if I raise rates 20 percent on all my old policies, it's going to have an impact on my new sales. People might say, "We don't want this product, because you've got a history of raising rates."

In GE's case, that's a decision we've made. How much of our growth is due to that is hard to say. If you look at some of the carriers that have had substantial increases, you do tend to see a drop-off in new sales. There's definitely an effect. The size of the effect is obviously going to vary quite a bit, depending on what kind of sales force you have. But you definitely need to consider the loss of future profits if you raise rates.

Brand Damage. There's brand damage, which matters more for some companies than others. The upshot of that is that you really need to look at things in total. You can't just look at that one block of business and say, "This block is losing \$10 million a year; I've got to raise rates." You've got to consider what it's going to do to the rest of your business. You've got to consider the implementation costs, and you've got to consider the whole-firm view.

More Options. If you do that calculation and decide that it's a borderline choice, it's a little bit risky to do—there are other things that you can do to improve the profitability of the block. Additional premium is really only part of the answer.

This is a short list of some of the most obvious things you can do, and I'm going to, after this, talk very briefly about conversion programs, but, in short, conversion programs is one choice.

Expense control is another where it can't really give you a big kick, but it can provide you an incremental improvement. And when you're just trying to reach a certain target of profitability, rather than return to your original profitability, all of these things can be helpful—reinsurance, changing your investment practices.

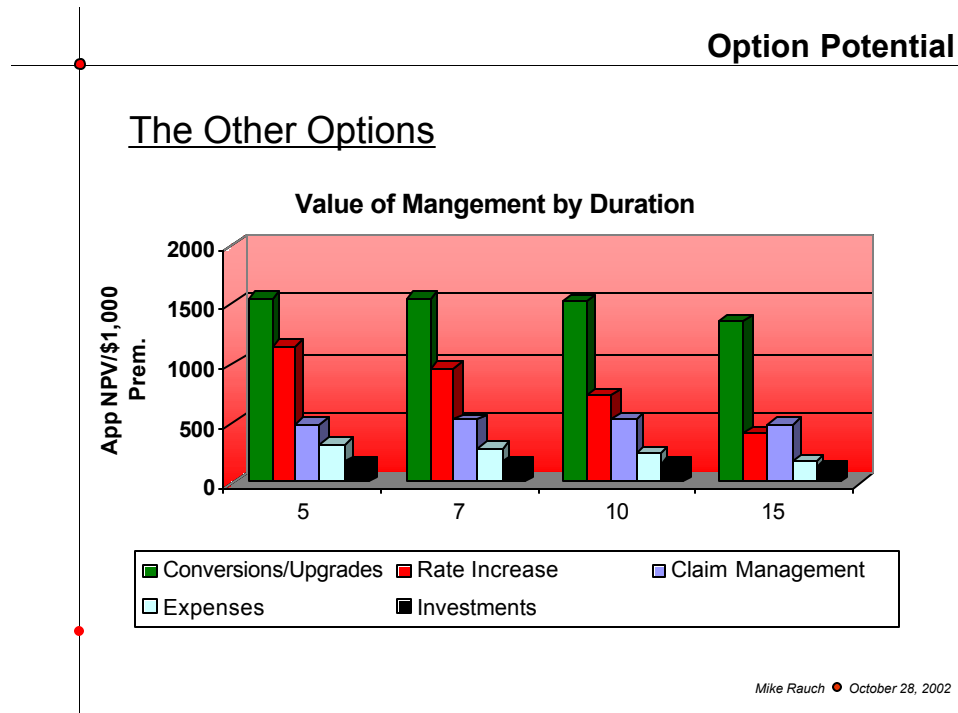
Typically investments are not treated as well as they should be for long-term care. A lot of times people aren't getting their 30-year assets. They're getting a mix of five and 10-year assets..

Claim management is another area where you can have a very large impact. Two percent on claims ends up working out to 10 percent or 12 percent on premium. So

if you can find a way to improve your claim practices, improve your auditing or do wellness programs to reduce the length of claims, then you can make a large impact.

These are typical block results (Figure 4). And if you look at the red, that's rate increases, and as we saw earlier, the value of those declines significantly over time.

Figure 4



The most valuable one is conversion programs, which is essentially going to policyholders in poorly performing blocks and converting them to a different policy.

For example, if it's an indemnity, nursing-home-only, you can generally switch to an integrated product and keep the same premium and lower your claims, just because the integrated products, as many of you may know, show much better experience. It's taking advantage of the fact that people haven't lapsed, and there's a certain amount of customer loyalty. You've already made the sale once.

They tend to be very effective, and you can get additional premium in some cases and a lower claim level in others. It's fairly level in terms of how effective it is by duration, because toward the tail, the claims matter more, and toward the beginning, the premiums matter a little bit more.

The other options here are claims management, expense management and investment management. Those are generally smaller in impact than your other options. If you're running at 8 percent, and somebody's breathing down your neck

to get to 10 percent, you can do it without raising rates just by being very careful and improving the small areas rather than the large areas.

Conversion Programs

I warn you right now there's really no good segue into the next section—conversion and upgrade programs.

The big problem—or at least one of the largest problems that people have had—is persistency rates have been much higher than expected.

But there's a reason for that. Most of these sales were very tough sales in the beginning. You got over a big hump just getting the first sale. There's an ongoing relationship. This person has paid you premiums for 10 years. There's a certain amount of trust. They still trust you're going to pay claims. And, as a result, you can get very high conversion rates going back to them with additional offers, cross-selling or even cross-selling long-term-care products. It's sort of a customer-lifetime-value approach.

The basic idea of a conversion or upgrade program is that you're taking the existing base of policyholders and offering them something else, something that's either going to help you manage claims better or give you additional premium.

Incidentally, these work particularly well once you've decided you really do need to do a rate increase, because you can offer the people the option, in which case people generally prefer the option of not raising rates and getting a slightly different product. They have an incentive to go through with a conversion rather than to pay more.

Done well, you can receive high conversion rates. Our experience, at least, has been that the customers are very happy with it. Occasionally, depending on how you handle the agents, they may or may not be as happy with it; but done right, the agents tend to support it. How captive your agent force is can make a difference. If you have a large brokerage relationship and start contacting individual policyholders, brokers get a little agitated about that, but there are ways to handle that. And as long as you approach it reasonably, it generally works fairly well.

Again, this requires experience analysis. It can be outsourced. I think there are one or two companies that are doing that. I know we're looking into doing that. It's not an advertisement, because we haven't started doing it yet. But there are people that can do it for you.

If you have your own experience system, and you think carefully about where your problems are coming from and how to address those problems, it's something that most companies can handle on their own by thinking about it and talking to other actuaries and finding out what the best way is.

MR. ALLEN J. SCHMITZ: I'm going to start by assuming that we've exhausted all the possibilities that Mike just talked about and that experience credibly shows that a rate increase is needed.

I want to walk through two things:

One is how you calculate the size of a rate increase, and we'll look at a couple variations of our case study—one for a level increase in morbidity, one for an increasing morbidity slope. We'll also look at changes in lapse rates. We'll also touch on the shock lapse and adverse selection implications and the cost of waiting to implement a rate increase.

The second thing I want to talk about is what you do about active life reserves. Do they need strengthening? What options or methods are available?

So let's look at the case study assumptions. This is an individual product. We are assuming that a rate increase is needed. We had an original pricing loss ratio of 60 percent. The average issue age was 65. The profit target was originally 17.1 percent (IRR). We're currently in duration six. The average premium at issue was \$1,400. The lapse rate that was originally priced with was 3.5 percent. In this first scenario, morbidity is running at 30 percent more than expected. So what level of rate increase is needed?

I've shown three different loss ratio approaches, and I'm going to go through sample calculations of each of them in a little bit.

The first one I'm calling lifetime loss ratio historical. We're going to solve for the lifetime loss ratio, assuming that premium was changed from issue. The second one solves for that same lifetime loss ratio, but we're only going to change premiums going forward. The third method is the future loss ratio method, where we're going to set the future loss ratio equal to what the original priced-for future loss ratio was.

There are a number of other approaches. Some include the active life reserves or different interest rates. Some may even attempt to pay for some reserve strengthening in the reserve calculation.

The new NAIC approach essentially uses the lifetime loss ratio future method, but substitutes in 58 percent and 85 percent loss ratios. Steve is going to go through this example in a little bit.

These calculations are only based on loss ratios. You're not allowed to increase rates if you have poor investment experience or high expense levels. I think that's an important point, particularly the way the new model regulation works. I think it would be interesting after our presentations here to have some discussion of

whether adverse experience in any of the pricing assumptions should allow you to increase rates.

Looking at the base case study assumptions, I had originally priced for a 17.1 percent IRR—we can see that over the life of the block, the premium is \$12,605. The claims are \$7,564. We have a lifetime loss ratio of 60 percent.

Figure 5

Case Study Base Assumptions				
Original Pricing – 17.1% IRR				
	Duration	Premium	Incurred Claims	Loss Ratio
Present Value over Life		\$12,605	\$7,564	60.0%
Present Value of Historical		\$6,445	\$1,152	17.9%
Present Value of Future		\$6,159	\$6,413	104.1%
	1	1,400.0	86.8	6.2%
	2	1,335.1	199.6	10.5%
	3	1,271.6	196.1	15.4%
	4	1,208.9	256.2	21.2%
	5	1,147.2	320.0	27.9%
	6	1,086.6	387.0	35.6%
	7	1,026.9	457.0	44.5%
	8	968.1	529.6	54.7%
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Now, if morbidity came in exactly 30 percent higher in every year, the premium is still \$12,605 over the life, but the claims now are increased by 30 percent (Figure 6). All the present values in this case study are done at 4.5 percent; you'll also notice that the IRR now is 2.4 percent, and that assumes a recalibration of the active life reserve that I'll discuss in a minute.

Figure 6

<p style="text-align: center;">Case Study Level Morbidity Increase of 30%</p>					
<p style="text-align: center;">Revised Claims – 2.4% IRR</p>					
	Duration	Premium (000's)	Incurred Claims (000's)	Loss Ratio	Revised LR / Original LR
Present Value over Life		\$12,605	\$9,833	78.0%	130%
Present Value of Historical		\$6,445	\$1,497	23.2%	130%
Present Value of Future		\$6,159	\$8,336	135.3%	130%
	1	1,400.0	112.9	8.1%	130%
	2	1,335.1	181.4	13.6%	130%
	3	1,271.6	254.9	20.0%	130%
	4	1,208.9	333.1	27.6%	130%
	5	1,147.2	415.9	36.3%	130%
	6	1,086.6	503.1	46.3%	130%
	7	1,026.9	594.1	57.9%	130%
	8	968.1	688.4	71.1%	130%
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So let's look at the three loss ratio approaches to calculating what kind of a rate increase—or the maximum allowable rate increase that we could get. If we set the 60 percent loss ratio equal to the present value of the revised incurred claims over the life of the business and solve for x, which is going to be the rate increase, assuming that we've changed premium from issue, it's no surprise it comes out to be a 30 percent increase to premium (Figure 7).

Figure 7

Potential Rate Increases

- 1) Lifetime LR – Historical

$$60\% = \frac{\text{rev}PV_{\text{life}} \text{ IC}}{(PV_{\text{life}} \text{ EP})(1+X)} = \frac{9,833}{12,605(1+X)} \quad X = 30\%$$
- 2) Lifetime LR – Future

$$60\% = \frac{\text{rev}PV_{\text{life}} \text{ IC}}{(PV_{\text{through 6}} \text{ EP}) + (PV_{7+} \text{ EP})(1+X)} = \frac{9,833}{6,445 + 6,159(1+X)} \quad X = 61.4\%$$
- 3) Future LR (set equal to priced for LR)

$$104.1\% = \frac{(\text{rev}PV_{7+} \text{ IC})}{(PV_{7+} \text{ EP})(1+X)} = \frac{8,336}{6,159(1+X)} \quad X = 30\%$$

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If we look at the lifetime loss ratio future approach, we're going to use the same revised incurred claims, but the premium here for the first six durations is historical and is not going to change. We're only going to change premium going forward. Solving for that premium increase to the 60 percent loss ratio gives us a rate increase of 61.4 percent, a dramatic difference.

The future loss ratio approach, which we're going to set equal to our original price for future loss ratio of 104.1 percent, again solves for the 30 percent increase, which, by no coincidence, is equal to the lifetime loss ratio historical approach, which will always be the case if we just have a simple level shift in the morbidity curve.

Issues To Deal With

Regulatory. Here are some of the issues related to each of these approaches: From a regulatory standpoint, there isn't any guidance in the model regulation or the model act, at least for policies issued before the latest version of the model regulation. However, in the guidance manual, they do take an approach that essentially is equal to the lifetime loss ratio future method when they go through an example with the 58 percent and 85 percent limits.

Administration. There are always data problems when you're looking at putting a rate increase together, but they are particularly an issue if you're going to use the future loss ratio approach, because there you need detailed assumptions of what your expected future loss ratios were from your original pricing.

Consistency. Consistency of new business to old is a key issue that's extremely important for policies sold under the new regulation. But I think it also applies to policies sold before that, the idea being that you can't be selling new business for rates that are less than what your in-force business is being charged, except for differences in benefits.

Profit Targets. Each method here may produce a different rate maximum allowable rate increase and clearly impact the profit projections. While the loss ratios dictate that maximum allowable rate increase, the overall profit picture for a company or a block of business may impact which loss ratio method is used.

Valuation Methods & Considerations

The question that always seems to come up when we talk about rate increases is what to do about active life reserves. I'm talking about statutory active life reserves. Should they be strengthened? Do they need to be strengthened? Should it be a gross premium valuation or asset adequacy testing that determines what is done? And what role does the gross premium play in calculating that active life reserve?

So I'm going to walk through a few different approaches for calculating that active life reserve. The names that I've come up with here attempt to be consistent with a paper. Like Steve, I did a little research on what has been done in the past.

There was a 1990 paper by Raws that attempted to discuss these issues for a Medicare supplement block of business. I'm going to try to apply them to long-term care.

Static. In what's called the static approach, you just use your original assumptions. You essentially do nothing. You keep your active life reserves where they were.

Retrospective. The retrospective approach assumes that you're going to have your revised assumptions from issue.

In the case study here, because claims are 30 percent higher, the reserves are just going to be 30 percent higher; and we're going to assume we knew that from issue.

Prospective. The prospective approach says: Take the reserve that you're currently holding, and let's recalculate a net premium based on our new best

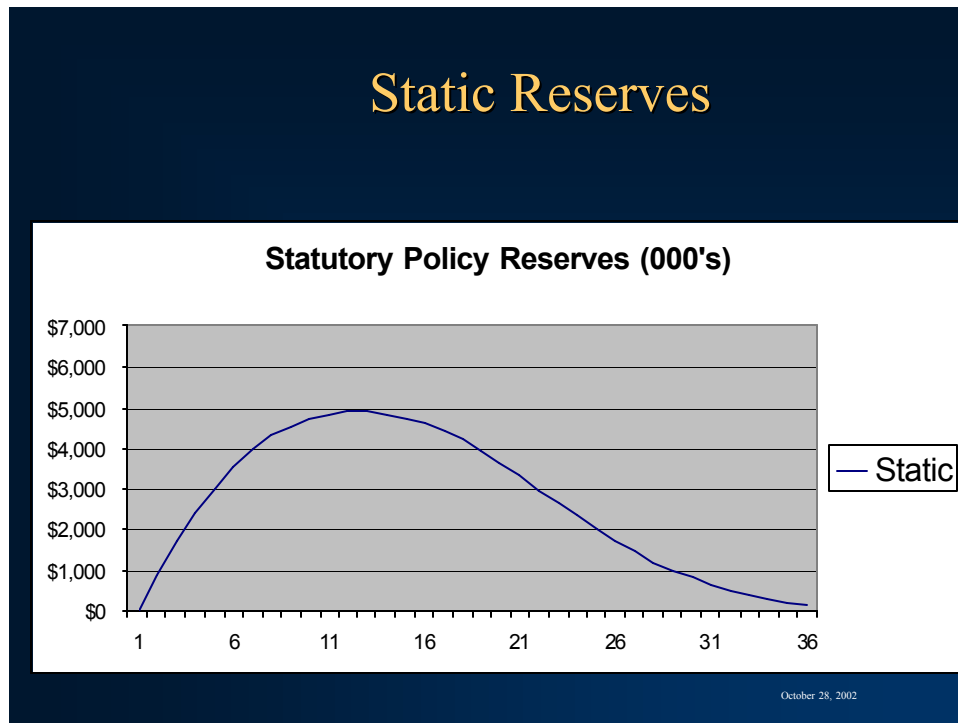
estimate of future claims. I think this one has some intuitive appeal, as you'll see graphically in a little bit.

Retrospective Gross Premium. The retrospective gross premium approach calculates a net premium as a constant ratio to the gross premium; and while the first three methods I have listed are based just on the claim costs and could be implemented at any time—not just when a rate increase is involved—in this case, the gross premium is going to be involved in your calculation. And if you don't change premiums, the retrospective gross premium method is going to be equivalent to the retrospective method.

This list is by no means exhausted; there are many variations. But I think as we go through some examples, it'll provide some ideas.

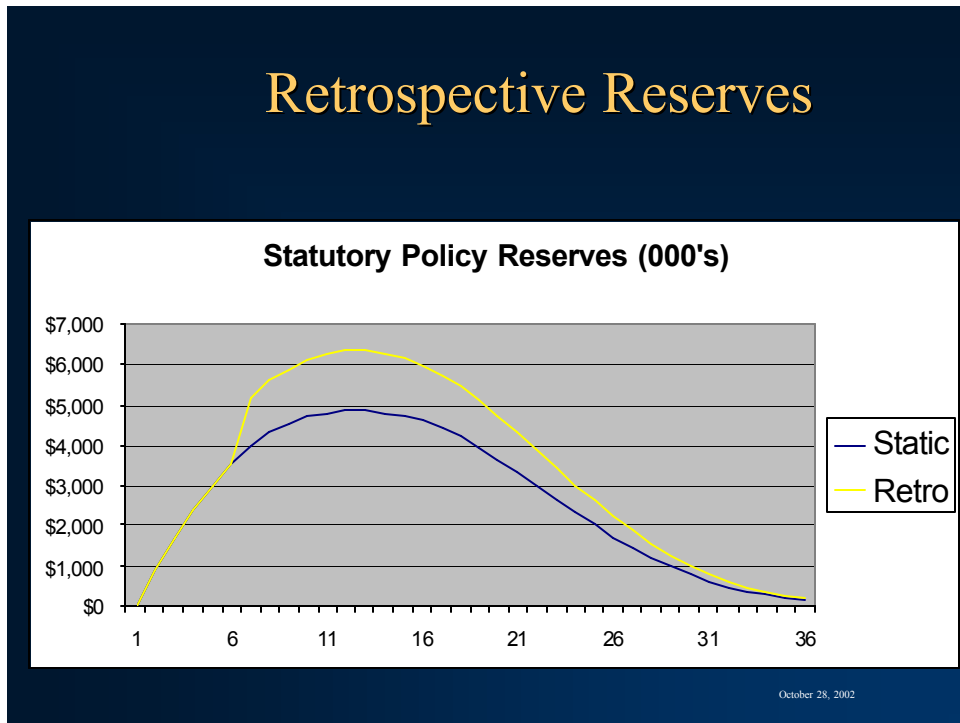
Static Example. The first graph here just shows a simple statutory reserve curve for our base case (Figure 8).

Figure 8



Retro Example. The next graph shows what happens under the retrospective method (Figure 9). The white line represents what happens if, in duration six, we just bump things up 30 percent—we strengthen reserves to that level.

Figure 9



Prospective Example. Under the prospective method, we need to calculate a new net premium, using this formula (Figure 10).

Figure 10

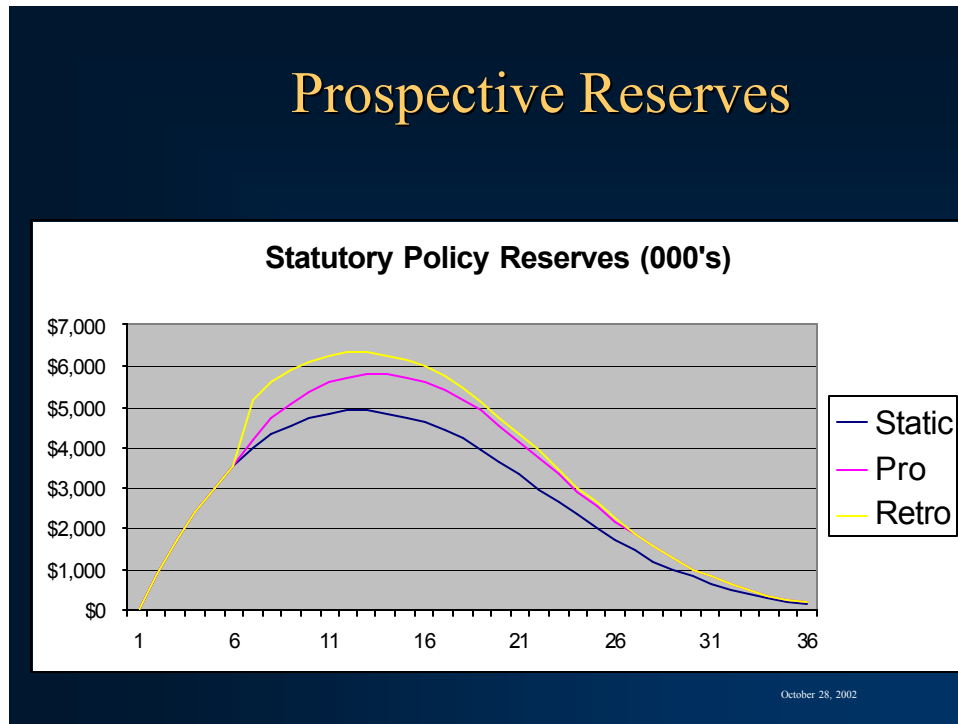
**Prospective Reserve Net
Premium Formula**

$$\text{New NP} = \frac{(\text{PV}_{7+} \text{ IC}) - {}_6V_x}{\ddot{a}_{x+7}}$$

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When you do that you get the pink curve. Under the prospective method you're starting at the same point, (Figure 11) but you're going to more slowly strengthen reserves over time based on your new net premium.

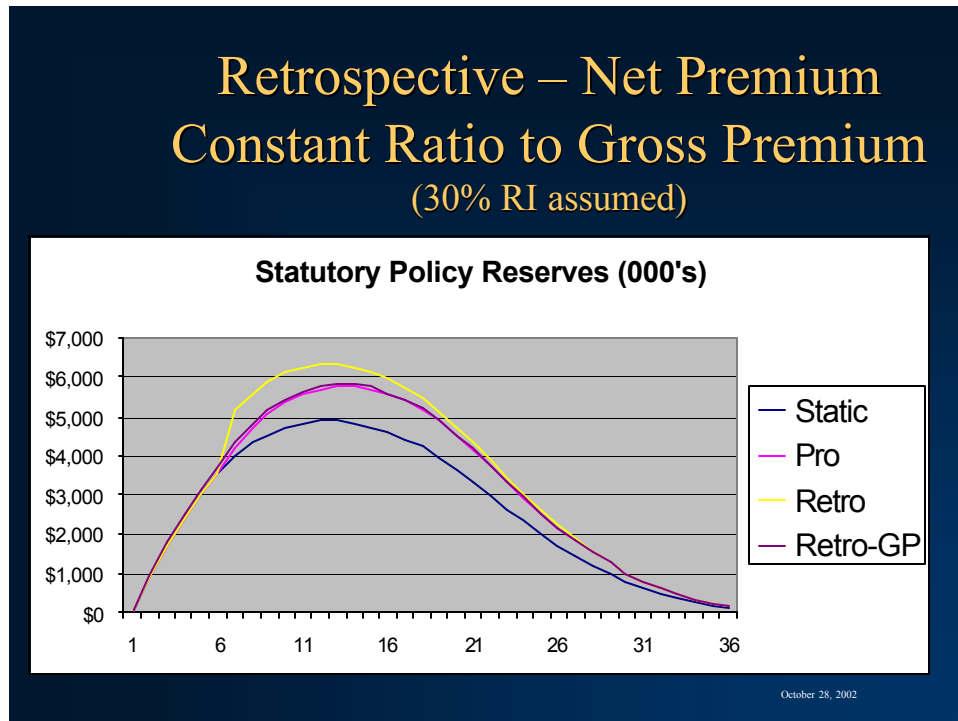
Figure 11



Profit Impact. The profit impact of the different methods is calculated by assuming a 30 percent rate increase and the original pricing IRR of 17.1 percent. No surprise here—the static approach, with which you have the lowest reserves, gives you the highest IRR over the life of that block. Then you have the retrospective, which would have the highest reserve levels, at 9.2 percent, and the prospective at 10 percent.

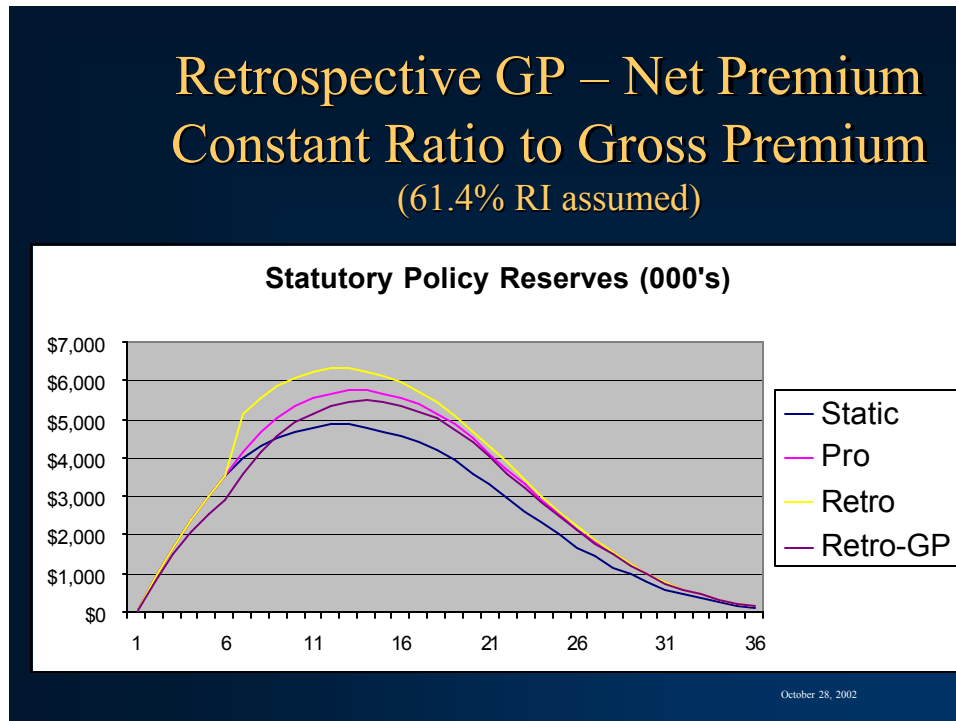
Retro Gross. Taking the retrospective gross premium approach, this approach looks over the life of the policy and solves for new net premium that is a constant percentage of the gross premium. In this case, using a 30 percent rate increase, the reserve is similar to what the prospective approach showed (Figure 12).

Figure 12



But if you look at where we implement the 61.4 percent rate increase calculated under the lifetime loss ratio future method, the reserve actually decreases from its current levels, which may indicate some of the problems using this approach (Figure 13).

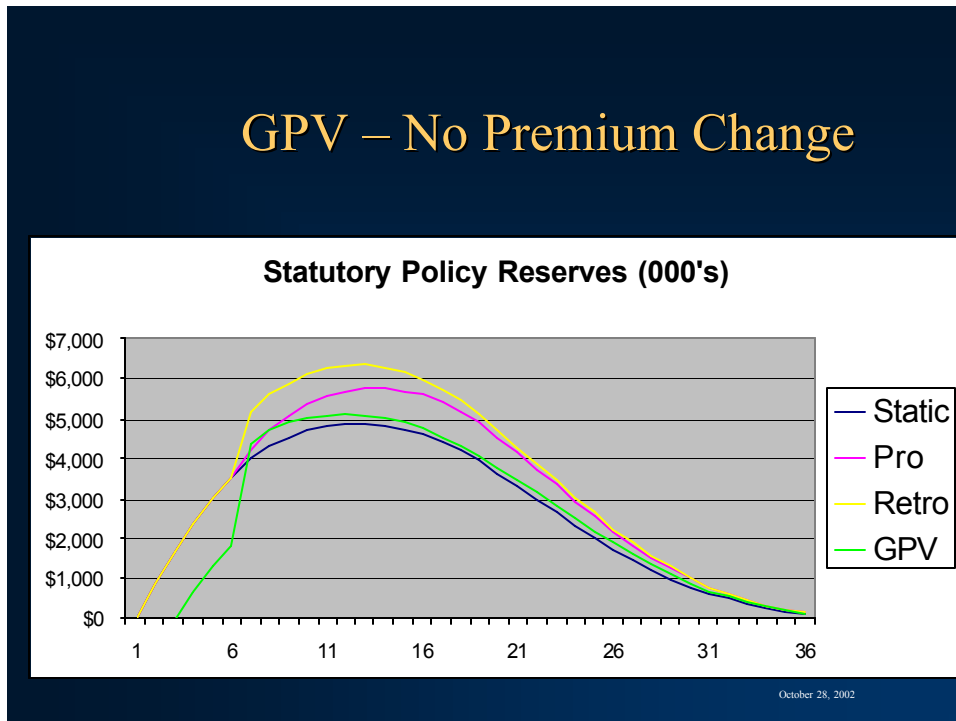
Figure 13



Gross Premium Valuation. So that's all good. But some might argue that under the NAIC minimum reserve standards and statutory accounting principles, the gross premium valuation is the ultimate test of reserve adequacy.

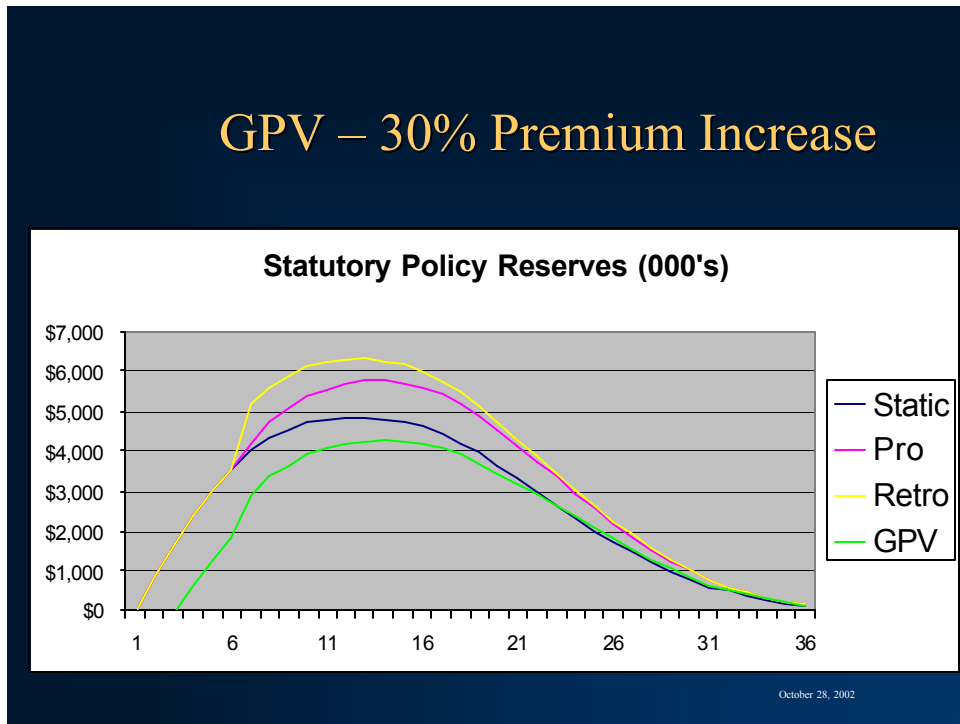
So looking at the gross premium valuation without a rate increase, at least in the early years after duration six, it shows that some reserve strengthening would be done (Figure 14).

Figure 14



But if we assume that we are going to implement, say, the 30 percent rate increase, then we're going to satisfy the gross premium test, and one of the other methods could be used (Figure 15).

Figure 15



A Steeper Curve. Now I'm going to walk through what happens if we have a steeper claim cost curve (Figure 16).

Figure 16

Case Study Steeper Claim Cost Curve					
Revised Claims – 1.0% IRR					
	Duration	Premium (000's)	Incurred Claims (000's)	Loss Ratio	Revised LR / Original LR
Present Value over Life		\$12,605	\$10,340	82.0%	136.7%
Present Value of Historical		\$6,445	\$1,339	20.8%	116.3%
Present Value of Future		\$6,159	\$9,001	146.1%	140.4%
	1	1,400.0	95.5	6.8%	110%
	2	1,335.1	156.3	11.7%	112%
	3	1,271.6	223.5	17.6%	114%
	4	1,208.9	297.2	24.6%	116%
	5	1,147.2	377.5	32.9%	118%
	6	1,086.6	464.4	42.7%	120%
	7	1,026.9	557.5	54.3%	122%
	8	968.1	656.7	67.8%	124%
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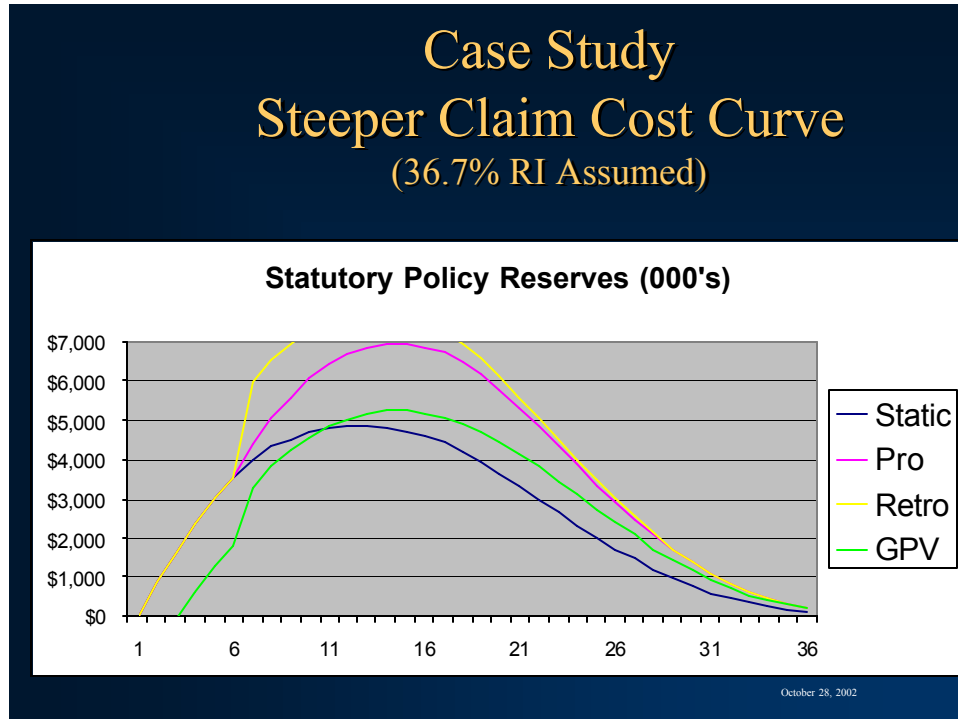
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I've assumed that claims started 10 percent higher than you originally had and that they drift off 2 percent a year after that. The impact to the profit from our 17.1 percent IRR is down to 1 percent, again assuming no rate increase and a prospective reserve change in year six.

Given the steeper curve, if we look at our rate increase calculations again under the lifetime loss ratio historical method, it's 36.7 percent, 75.1 percent under the lifetime loss ratio future method, and 40.4 under the future loss ratio method. And you'll notice now the future loss ratio and the lifetime loss ratio historical are not equal, and that's because we've changed the slope of our underlying morbidity curve.

To me this is far and away the most interesting graph in the whole presentation. (Figure 17).

Figure 17



One could argue that at this point, I look at my gross premium valuation under this approach, and I'm adequate—I shouldn't need to strengthen reserves.

However, if I look three, four, five years down the road, and things continue to happen as projected, I'm going to have a reserve problem. It brings up the question, "What should I do, if anything? Even though I'm adequate today, should I strengthen reserves?" Because I think if I look down the road and things continue because I have now a steeper curve, I'm going to have a reserve adequacy problem.

It seems to me if you can clearly show that this is the case—that you're going to have a reserve problem—that you should do something about it today. Maybe one of the other methods is more appropriate.

Lower Lapse Rates. Now let's look at what happens under lower lapse rates (Figure 18).

Figure 18

Case Study Lower Lapse Rates					
Revised Lapses – 11.0% IRR					
	Duration	Premium (000's)	Incurred Claims (000's)	Loss Ratio	Revised LR / Original LR
Present Value over Life		\$14,724	\$10,205	69.3%	115.5%
Present Value of Historical		\$6,755	\$1,230	18.2%	101.9%
Present Value of Future		\$7,970	\$8,974	112.6%	108.2%
	1	1,400.0	86.8	6.2%	100%
	2	1,363.1	142.5	10.5%	100%
	3	1,325.4	204.4	15.4%	100%
	4	1,286.6	272.7	21.2%	100%
	5	1,246.8	347.7	27.9%	100%
	6	1,205.8	429.4	35.6%	100%
	7	1,163.7	517.9	44.5%	100%
	8	1,120.3	612.8	54.7%	100%
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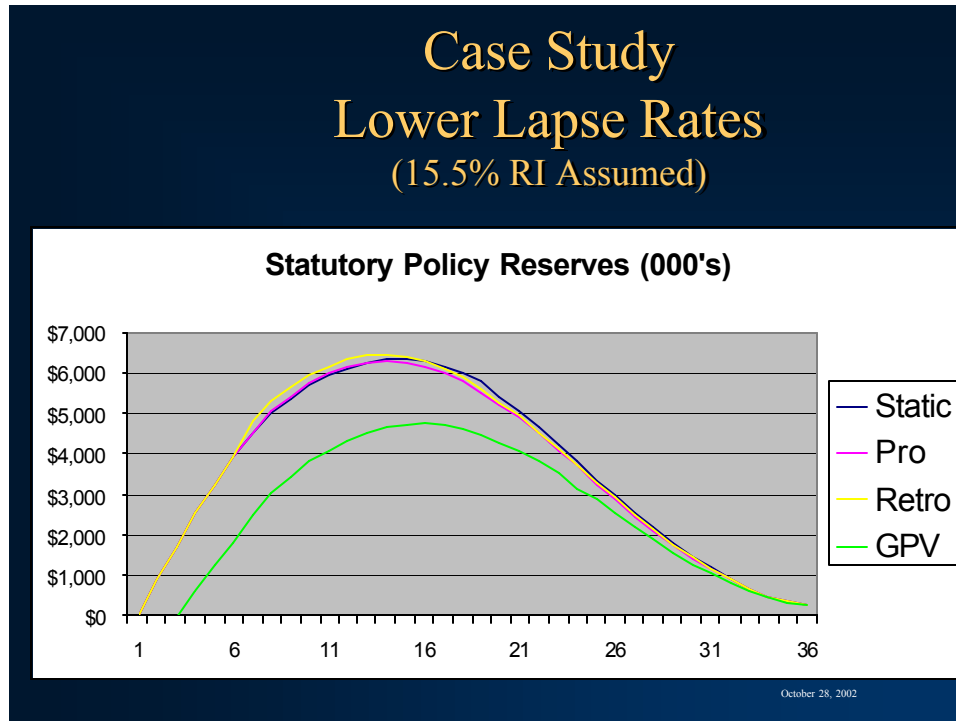
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Here I had 3.5 percent originally priced for lapse rate. I've changed that down to 1.5 percent. You can see now that the present value of premium actually increased from the \$12,605 to \$14,724. The claims also increased. The year-by-year incurred loss ratios are identical, because I've assumed I'm going to hit my morbidity as expected. But the lifetime loss ratios are higher than expected because I'm having these people hang around longer.

If we look at the rate increase calculations, if all that happens is that lapse rates are lower than expected, under the lifetime loss ratio historical, we have a 15.5 percent increase. Under the lifetime loss ratio future, the increase is 28.6 percent. It's 8.2 percent under the future loss ratio method, which is even lower than the lifetime loss ratio historical method, because you're only getting a rate increase for future lapses being different from expected.

Looking at the reserves under the different methods, you'll notice that the reserves here on an absolute basis are even higher than the original graph. Even though the reserve factors haven't changed, there are more policyholders around.

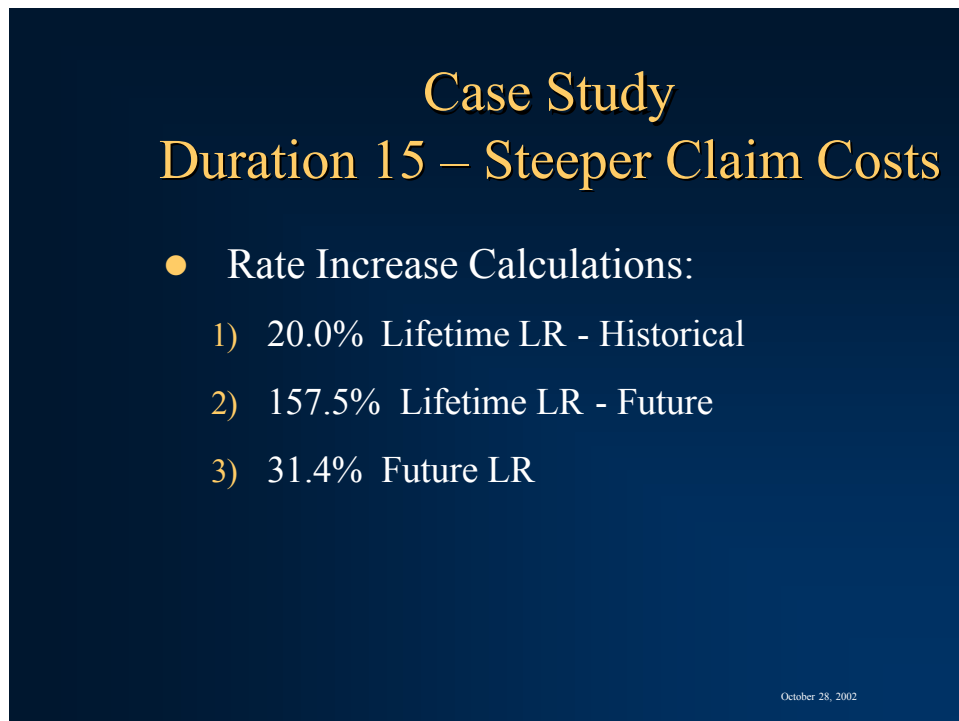
Figure 19



I also wanted to look at what happens if initially, things come in as expected, but morbidity is deteriorating at 1.5 percent per year.

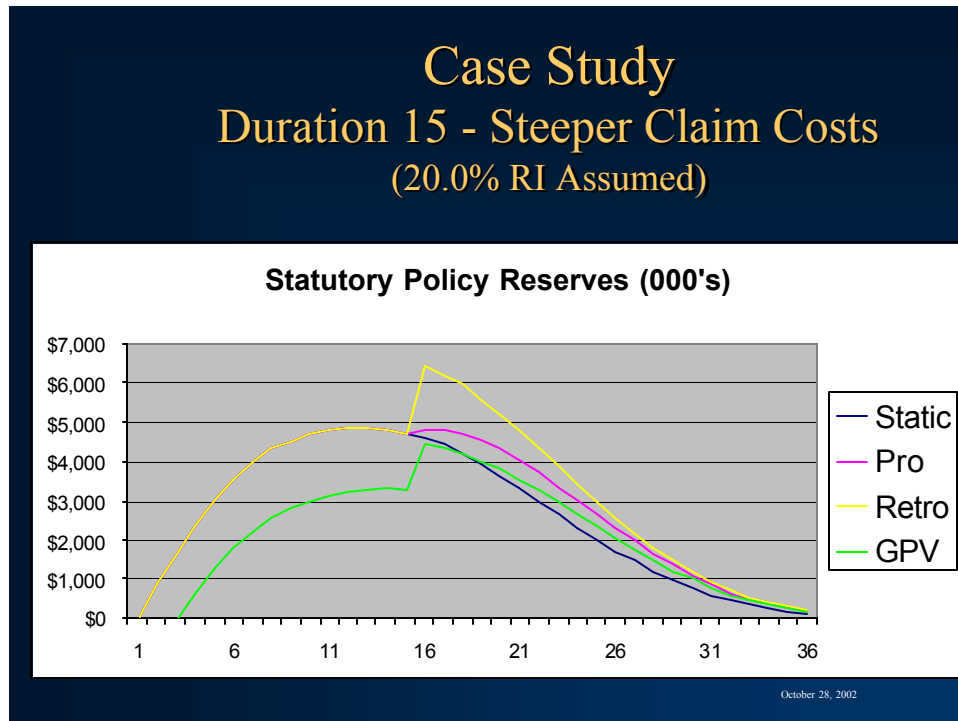
So now maybe we don't look to implement a rate increase until after duration 15 (Figure 20). Looking at our rate increase calculations, if we do the lifetime loss ratio historical method, we can only get this 20 percent rate increase; whereas if we look at the lifetime loss ratio future approach, you can see the large, 157.5 percent rate increase, highlighting the dramatic difference between the two approaches.

Figure 20



Again, the reserve graph here shows that if you do not change from the original reserve factors, you may be OK today, but down the road, you may have some problems (Figure 21).

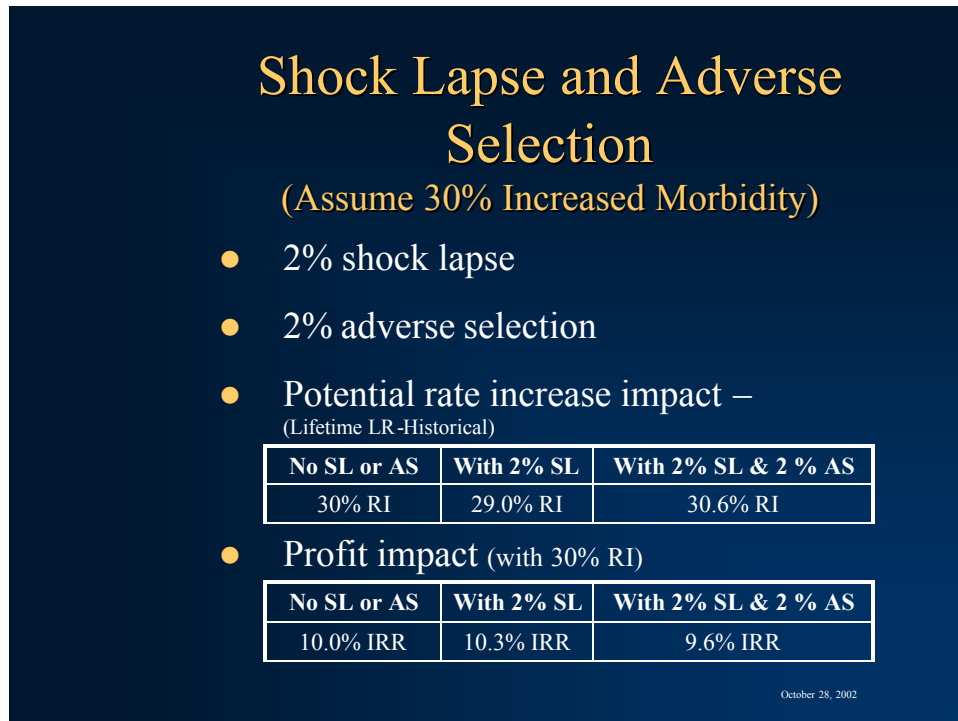
Figure 21



Shock Lapse. Let's talk a little bit about shock lapse and adverse selection.

Assuming that we have the 30 percent flat increase in morbidity, and we have 2 percent shock lapse—(1 percent for every 15 percent of rate increase)—we also assume that we have 2 percent adverse selection, because those who have lapsed were healthier (Figure 22). The rate increase impact under the lifetime loss ratio historical method, if you remember, was 30 percent without any shock lapse or adverse selection. If you add 2 percent shock lapse, it's down to 29; and if you add in the adverse selection, it goes up slightly to 30.6 percent.

Figure 22



The profit impact, if we assume a 30 percent rate increase, was 10 percent without any shock lapse or adverse selection. It was 10.3 percent if you have the 2 percent shock lapse. It goes down slightly to 9.6 percent if you add in the adverse selection. So for this example, at least, there's really not a large impact on the rate increase or the profit levels for adverse selection and shock lapse.

And my last slide here looks at the impact of waiting to implement a rate increase (Figure 23). What if we wait a couple of years?

Figure 23

Impact of Waiting 2 Years on RI Level and Profitability
(Prospective Reserve Change)

RI Scenario	End of Year 6		End of Year 8	
	RI	Lifetime IRR	RI	Lifetime IRR
30% Higher Morbidity				
1)	30.0%	10.0%	30%	8.2%
2)	61.4%	16.4%	80%	15.3%
3)	30.0%	10.0%	30%	8.2%
Steeper Morbidity				
1)	36.7%	9.5%	36.7%	7.4%
2)	75.1%	17.4%	97.9%	16.6%
3)	40.4%	10.3%	42.5%	8.5%

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If you look at the first scenario, in which we have 30 percent higher morbidity, Rate Increase Scenario 1 is the lifetime loss ratio future method, and that had the 30 percent rate increase that we solved for and the 10 percent IRR.

If we wait two years to implement that rate increase, we'd still solve for the same 30 percent rate increase, but our profit on that book now is down to 8.2 percent, which is different than what happens under the lifetime loss ratio future method.

Scenario 2, in which we originally solved for the 61.4 percent increase, gave us a 16.4 percent IRR on the block. If we wait two years to do the rate increase in that case, we actually solve for an 80 percent rate increase. The IRR then would be 15.3 percent.

The future loss ratio again is the same as the lifetime loss ratio historical.

A similar story shows up in the steeper morbidity, in which you have a 36.7 percent rate increase which gives you a 9.5 percent IRR. If you wait two years to implement that, you're still going to solve for the same 36.7 percent rate increase, but your IRR will be knocked down to 7.4 percent.

Likewise, with the lifetime loss ratio future method, it goes from 75.1 percent; waiting two years, you'd have to implement a 97.9 percent increase. So the impact

of waiting on profit levels and on rate increases can be major or can be minor, depending on which calculation method is used.

I've walked through several different approaches to calculating the maximum rate increases and some different approaches to adjusting active life reserves. I hope it's shown that the approach can really impact the rate increase and profit levels. So it's important for an actuary to understand these different variations in methods and approaches and their implications.

Steve is going to take this and expand on it and go through the NAIC model regulation under the new approach.

MR. SPERKA: The whole purpose of setting up the session was not to demonstrate how you do a rate increase, but really to show the risks and what you probably can and cannot do under the model. I think it tells us a lot about the types of risks we have with the product initially and what types of margins that we should be considering in our initial pricing.

I have copied AI's case study for consistency's sake; but now we are pricing this product under the 2000 NAIC model.

We've got our average issue age 65. We've got the same premiums and basically the same assumptions as AI. All of the assumptions here are purely hypothetical.

Now to go through our example, the first thing you've got to get a feel for with the initial pricing under NAIC model is what are my margins for moderately adverse experience. In order to implement a rate increase, they would presumably have to exceed that level.

Now there are a lot of ways we could go about doing that; there's an Academy Practice Note out there that identifies some different ideas and considerations.

One concept that comes up is: Am I going to take specific margins and add them to what I originally assumed, or am I going to look to margins already in the product and use those as my margins for moderately adverse experience? You can do it any way you want.

For purpose of my example, I am going to look to profitability margins already in the product as margins for moderately adverse experience.

I think your moderately adverse experience level establishes a threshold, such that up to a certain point, you are willing to live with experience and the associated profitability levels. And until my experience actually exceeds those margins, I'm not going to raise rates. That seems to be the spirit of the model.

I think it's important in doing this that you really get a feel for what your margins are and communicate them to management.

Quantify, Communicate, Document

Let's take a look at our example.

If I take a look at your expected returns under this hypothetical example, if all of my best estimate assumptions came through, I would be hitting a 17.1 percent internal rate of return. Now, for my certification, I needed to certify that these rates are OK under moderately adverse experience. I looked at my morbidity, and I decided, based on what I know, I think 15 percent is moderately adverse. Based on lapse rates, investment returns, I think these are moderately adverse conditions. I'm willing to live with experience up to any of these specific levels.

FROM THE FLOOR: Separately or together?

MR. SPERKA: Separately.

So you go back and say, "Well, if I experience 14.9 percent morbidity increase, what kind of profitability would I be returning?" Well, it gets to be about 9.8 percent. That is the level that I'm certified to. I can live with that experience and not request a rate increase.

Under this hypothetical example, let's accelerate it now, six durations. My actual morbidity has been 30 percent greater than my best estimates. I said before that 15 percent was my margin for moderately adverse experience. So I've exceeded those conditions, and I'm going to ask for a rate increase, and presumably it's justified.

Now let's consider some of the different ways we could calculate a rate increase. There are several ways you could go about calculating, but let's consider what you could or couldn't do under the NAIC model. I think there are three key components that come into play when you're figuring this out.

First you've got to make your new actual certification that says that your new rates are sufficient under moderately adverse experience. Second, you're going to have to show that your premiums do not exceed the loss ratio premium caps, 58/85. I think the third critical component is the hypothetical relationship of my renewal premiums on this business versus what I'm selling today, if I have a new block that is currently being sold.

For the purpose of this example, I'm going to consider two methods of calculating the rate increase.

First I want to consider the loss ratio future method.

The way I think about this method is that you increase premiums to whatever level is needed to get the loss ratio back to the loss ratio that was initially filed. Some people would call this recouping past losses.

The other method I want to consider is called the lifetime loss ratio historical method, which basically determines the rate I would have charged from issue had I known my experience was going to look like it does.

Certainly there are any number of ways you can do this, but I think these methods are bounds in terms of the implications they have on the financial risk to the company—versus what some people feel is more reasonable or perhaps what they feel is currently allowed under current regulation.

I want to step through each of these examples.

Loss Ratio Future Method. Under the loss ratio future method, my morbidity was 30 percent worse, and I have a rate increase of 61 percent. It's so high because I'm making up for all these losses I've had for the first six years.

Now if I implement this rate increase under the NAIC model, I've got three things to think about: I've got to make the certification that my rates are sufficient under moderately adverse experience, I've got to demonstrate that I meet the loss ratio cap, and I have to certify that my renewal rates do not exceed new business rates. If I implement this rate increase, and I look at my now-expected lifetime return on the business, it's 16.4 percent, and return is very close to what you initially thought on the block, because you're basically making up for those past losses.

For my moderately adverse experience, I'm going to look to my internal profit margins. If I'm willing to live with a 15 percent morbidity deviation under the new rates, and it actually occurs, I would be down to 10.1 percent expected rates. If I'm comfortable with that, I can sign off on that certification. So I've handled the first one.

Second piece: What would my loss ratio premium cap be, the 58/85?

Well, if you go through the guidance manual, it says you can include your margins for moderately adverse experience in the loss ratio calculation. If you go through this calculation, the 58/85 maximum premium would be \$2,409, which is less than the \$2,260. I can make the second part of the certification.

Now the third piece: What would I be charging my new business rates today?

Now, let's say I've got a new block that I just priced, and the benefits are similar. Well, my new business rate is about \$1,790, and that's basically using the same assumptions as before, except my morbidity is 30 percent higher.

You can clearly see under this scenario that you would have a very hard time making that last piece of the certification. If you wanted to implement this method, it may be challenging in a lot of states. I think the key point of this one is, in terms of the risk of the product, this method of calculating a rate increase presents the least financial risk to the company. To the extent that I had losses, I can make up for that. I think in reality, under the NAIC model, it may be unrealistic to actually think that you can make up for those losses.

Lifetime Loss Ratio Historical Issue. Now let's consider the other method, the lifetime loss ratio historical method, which basically says: Had I known about this experience from issue, what should I have charged these people, given their morbidity was 30 percent higher?

Under this method, your rate increases to \$1,820. As you can expect, since you're not making up your past losses, the now-expected profitability on the line is much less. It went from 17.1 percent, which was what we originally thought down to 10 percent.

Now what am I going to do about my moderately adverse experience condition? Can I make that certification? What would this look like if my morbidity was now 15 percent worse than I thought?

Now I'm getting down to a pretty low rate of return—if I'm signing the certification saying that if morbidity was 15 percent worse, I'm basically saying I'm going to live with something down to this level.

Now, if those margins aren't sufficient and you're really not willing to make that guarantee, you would have to increase this rate more to give yourself more margin, but that's going to create a problem, which I'll get to in a second.

What's my loss ratio premium cap, the second piece of the certification? \$2,409. I'm okay there. I can move on.

The third piece—what will my new business rate be? Well, my new business rate now, because of the way we did the rate increase, is basically what I should have charged these folks from issue. These two premium levels are going to be pretty similar. There's a slight difference, because the rate increase is based on a loss ratio calculation, while I used more of a profitability measure.

So my in-force rates were about equal. I could likely make the clean certification here, but recognize that if this is the way I was going to determine the rate increase, it has a much more significant impact on financial results.

To make the initial certification that your rates were sufficient under moderately adverse experience—if you weren't willing to live with this—then you would need to increase your rate more.

Having never actually gone through an example, I think this is useful to consider when doing the initial pricing. What types of margins do you want to include for moderately adverse experience? Think through down the road and consider the question, "If I needed to increase rates, how would I handle it, and what does that mean?" I think it has a big impact.

Just to reiterate some of the points I made: In terms of that moderately adverse experience, it's a good idea to get a good feel for what it is and communicate your moderately adverse margins. If I'm making that certification, what does it potentially mean to my profitability?

But also consider the value of that premium adjustability when you're setting your initial margins. You know, Mike made the point earlier—if you do any work to consider the risk of the block, if you're not using NAIC risk-based capital (RBC) standards and doing your own modeling, make sure that modeling or whatever you're doing considers what you can actually do in terms of rate increases in setting those risk levels.

That is the basis of our comments, and I believe we have some time left for questions.

FROM THE FLOOR: I think the example you gave was very interesting, except I'm going to make a contention that only the first two factors really come into play. The reason why: With the third one, in terms of your in-force premiums and your new premiums, there are inevitably going to be all sorts of things that you can use to justify the differences.

And it's not just the benefits that you can have a wide variance in. Let's say that you think the reason your morbidity's up 30 percent is because you didn't use necessarily the right underwriting style, and now you're using the right underwriting style. That would be a justification for the difference there, as well.

If the morbidity for the whole industry had gone up that 30 percent, you're probably up higher on your new one; but you won't have any problem satisfying that third certification, definitely from the standpoint of what you can justify and certify to, but probably from a practical standpoint in terms of what you've learned.

One of the big problems I find is that the rate increase structure allows you to take moderately adverse experience into play on the rate increase, which means that when you go in for a rate increase, you're actually asking for a much larger increase, based on having to certify to moderately adverse, than you really expect to need. The result of that will probably be, over the long haul—if things are stable

and you've learned what's going on and you know what's right—that you can wind up with a windfall profit at the end of that period of time, which may actually increase your internal rate of return beyond that which you originally expected in prices. You get rewarded for the rate increase.

MR. SPERKA: Actually, I completely agree with you on how that certification of the in force versus the new business is going to work. There are ways that you'll be able to justify things and I think make the case to the regulator why in force and new business differ.

There is another issue to consider if you implement a much more significant increase to your in-force business versus your new business. I think you're going to potentially set up a replacement issue from anyone who currently has the old block, especially if they're in the early durations of the business. They now can get to a brand new block that's much cheaper, and it's just a fairly expensive situation—you have all these people in the early durations of the policy lapsing and purchasing the new one, which is now much cheaper.

FROM THE FLOOR: You're assuming a six duration, which is fairly early.

MR. SPERKA: Yes.

FROM THE FLOOR: I think you'll find a difference in premium for six years attained age to be nearer the nonreplacement issue based on the additional attained age.

MR. SPERKA: It depends how old you are, too. I think at the younger ages premium levels by issue age are much flatter.

FROM THE FLOOR: I don't know if this is going to work. On that same sort of issue, when you come in and set your moderately adverse experience standards for the re-rate, what's your feeling on where those margins should be in comparison to what they were originally? I could make one argument that they'd be smaller because I know more; but at the same time, they have a bigger impact on my total profitability, so they might end up being much wider margins.

I don't know how that affects the windfall profit, but I'll have to think about that if I decide to try and get a windfall profit from someone.

FROM THE FLOOR: Just a follow-up on this topic.

The NAIC Life and Health Working Group has specifically addressed this issue and has reaffirmed the use of margins in rate increases. The implication there obviously is that premium adequacy is more important, and that's the overriding reason.

I want to bring up a second issue, and that gets to some of the slides that Al had. On the reserve increases, I have two points: One is that if you'd ever get to the point where you don't strengthen reserves, and your gross premium valuation shows that liability, you're going to be automatically setting up deficiency reserves. So you're going to be setting up the higher of the two under current requirements.

Second, I think there's another approach that an actuary could use, which is really taking a page from GAAP—you'd unlock your reserve and calculate your reserve as the amortization of your current liability, plus a net premium to cover the future claims costs. So you'd have a different way of grading.

MR. SCHIMTZ: I think that's what I tried to do in that prospective method. Essentially it's looking at the whole block of business, but there is an extra net premium on top of your original. So you're slowly strengthening over time. The calculation is all in one, but I think it's taking that same approach—you're slowly strengthening it.

You could break the calculation into the two pieces. But I also agree with your comment on the deficiency reserves.

FROM THE FLOOR: I have a question for you, and it may just be that I didn't really understand your example.

You documented that you were expecting you could withstand 15 percent worse morbidity just with margins, that was acceptable, but then you actually experienced 30 percent worse. In your numbers, did you do something where you said, "Let's calculate the rate increase just for the 15 percent excess morbidity?" You know, when you said initially, "Oh, I think I can withstand 15 percent, and I won't do anything," would you then have gone back and done the rate increase assuming, "OK, I said I'd take 15 percent, I didn't say I'd take 30; I'll take the additional 15?"

MR. SPERKA: It's a good point, and who knows how that's going to be considered?

FROM THE FLOOR: I have a question on that. It seems to me that you're actually taking only the 15 percent excess, because when you put the moderately adverse experience on that 15 percent excess, you drive it up to the 30 percent; so that effectively—since you had to put that moderately adverse on the rate increase, as well—you wind up doing the same 30 percent you would have done.

MR. SPERKA: You do end up actually just increasing 30 percent, and that's what the example did.

FROM THE FLOOR: It's actually 45 percent.

FROM THE FLOOR: You could probably justify 45 as long as you had the \$2,400 cap. In many companies, that's what they would do. They would just use the cap, because they figure they've got to do the rate increases anyhow.

FROM THE FLOOR: I've got a question for Mike. I was interested in your comments about the alternatives to rate increases, particularly the conversion option. I was surprised to see how much impact you have seen or expect there is from using conversions instead of rate increases.

I understand that nursing home coverage—stand-alone, for example—usually has worse experience. But I assume some of that is the dynamics of who buys it, and maybe the agent's selling it and some other things, whereas we're talking here about the customers you already have. It's a closed universe of people, and I'm having trouble understanding why there's this big impact, unless those people basically make choices that turn out not to be in their best interests. They accept a new package that has maybe the same premium, but they end up getting less benefit out of it. You're not going to get that much of an impact.

MR. RAUCH: The block that I used as an example is essentially what you see in a lot of the older policies where everything is indemnity, nursing-home-only. It's not so much individuals choosing nursing-home-only when they have the option of home care. It's more that's what everybody had. If you look at a standard block now, a very small fraction of it is going to be nursing-home-only, and you won't see as much impact if somebody already has a current policy. Does that answer the question?

FROM THE FLOOR: I guess I would question the same thing. Are they ending up with the same daily benefit amount, and now you've just changed it from indemnity to reimbursement? Does that mean that they originally were over-insured, and that was a big part of the reason why you're getting all these savings?

MR. RAUCH: Yes, let me go into it a little bit more.

There are a couple things generally that drive the increased claims costs. One is the indemnity aspect, and in a lot of places people are over-insured. When you have over-insurance on an indemnity product, for those of you who have experienced that, you get very bad experience, because you're paying people to stay in a nursing home. So part of the attempt is just to switch to a reimbursement product in which you no longer have the risk of over-insurance.

There's a second aspect: You are typically offering them a lower daily benefit, but people are willing to exchange that for the ability to use home care. And when you craft these products, there are a lot of different tradeoffs that you can make, but essentially you want to try and offer something to the policyholder that they want that's lower cost to you. What we have done has been to offer an expense

reimbursement policy with home care in exchange for an indemnity nursing home product.

It was surprising to us. It exceeded our expectations in terms of how much of an impact it can have. It's a very, substantial impact when you start moving people into a home care environment.

I don't have all of the details behind it right there, but it was a surprisingly large impact. And it works much better the worse the policies are running. When you've got people who are well over-insured and who are indemnity, you're going to save a lot of money. When it's people who are borderline, there may not be as much of an impact.

FROM THE FLOOR: I'd like to ask a follow-up question: Essentially what you're saying is you're taking the \$1.20 worth of benefits that they have and substituting for a dollar of benefits that they would prefer to have instead, from the standpoint of how they picture it.

MR. RAUCH: In that example, yes.

FROM THE FLOOR: In many cases it means a lot of shifting of, say, nursing home costs that they would have incurred and you would have paid for home care costs that they envision they'll be able to stay at home and utilize and maybe have a lower overall benefit.

MR. RAUCH: Right.

FROM THE FLOOR: And my concern with that is, both from the regulatory standpoint and from the litigation standpoint, when somebody discovers that they really gave up benefits that they were likely to have received in return for lesser benefits that they think they prefer to receive but don't actually utilize in the same way (which also may explain a lot of the savings). Everybody would like to get their care at home, yet in reality they may not be getting it that way and, therefore, have lesser benefit when they exchange their policy.

MR. RAUCH: Obviously there's an issue, in that anything that you do as an insurer with which you expect to reduce claims, you can argue that you've reduced their benefit. I guess part of it revolves around when somebody's over-insured—they don't think in advance of using that to make money. When the nursing home's \$100 a day, and they're at \$150 a day, they're not buying the insurance to make money; they're buying the insurance to cover their costs. And to the extent that you give them this lower daily benefit, and you still cover all their costs if they go to a nursing home, they haven't actually lost anything. I mean, they've lost this additional benefit, but in terms of the insurance benefit, they're still fully insured for the risk that they're trying to cover.