

RECORD, Volume 27, No. 3*

New Orleans Annual Meeting

October 21-24, 2001

Session 106IF

Why Is Long-Term-Care Pricing Different From Any Other Pricing?

Track: Long-Term Care/Health

Moderator: ABRAHAM S. GOOTZEIT

Panelists: JEFFREY S. DRAKE
ARTHUR J. VERNEY
RONALD M. WOLF

Summary: Panelists and participants discuss pricing issues and business risks associated with insurance products (such as life, annuities, disability income, and other medical insurance), and compare them to long-term care (LTC). This session identifies industry practices to minimize pricing and business risks for other insurance products and discusses if these practices are applicable to LTC.

MR. ABRAHAM S. GOOTZEIT: We have a knowledgeable group of panelists today that will spend first part of the session discussing the topic. After that, we encourage each of you to offer comments and ask questions, and we'll try and make it as interactive as we can. I'm going to introduce all three of the speakers first, then they'll make their presentations, and we'll get on to the interactive part after.

First is Jeff Drake, who is vice-president of the financial services division of Golden Rule Insurance in Indianapolis. Jeff is responsible for all issues in the financial services division, including pricing, valuation, financial projections, support, and regulatory compliance. Most of that business contains a long-term-care benefit. Jeff will talk about life insurance and annuities.

Then we have Arthur (Tad) Verney, who is the co-founder and managing member of Disability Insurance Specialists (DIS) in Bloomfield, Connecticut. DIS is a consulting and administration firm that provides services to the insurance companies for disability income (DI), LTC, and critical illness. On the consulting

* Copyright © 2002, Society of Actuaries

side, they provide product-manufacturing support, including design, development, pricing, and filing; implementation support; and actuarial consulting services. Tad functions as the company CFO taking the lead on most of the consulting services. Tad will talk about long-term care and disability income.

Our third panelist is Ron Wolf. Ron is a principal at Tillinghast-Towers Perrin in the St. Louis office. Ron provides consulting services to Blue Cross/Blue Shield plans, state risk pool, state insurance departments, and other health-related organizations.

My name is Abe Gootzeit, and I've been with the St. Louis office of Tillinghast for 15 years.

MR. JEFFREY S. DRAKE: We'll talk a little today about why pricing long-term care is different from pricing life and annuity. What I've done most of my career has been life and annuity. For the last dozen years, I've worked on combination products providing long-term care through life insurance, as well annuity contracts.

I'm going to cover five areas today.

1. Demographic trends.
2. Definition of the insured event for long-term-care. I'll probably get sidetracked when I get there and talk about the insurable risk on long-term care and compare that to life insurance.
3. Where we get our experience. The morbidity assumption is a little bit different, between life, where you're looking for probability of death, and long-term care, where you're looking for two things. You're looking for the incidence rate as well as the continuance table. So it's not really an event, it's a process.
4. Administrative systems. We'll see some differences there.
5. Regulatory issues, which will wrap up and encompass everything.

We're all aware of the demographic trends. There's significant boom population coming through, and they've changed everything before them. They're going to change our long-term-care usage. As most management has viewed this, they say there's a need for long-term-care insurance. And demographers say there's a need for long-term care. It's interesting to see that there's a little distinction there of whether or not these people will buy. To date, 5 to 10 percent of the available population has purchased the long-term-care products. Many marketers look at that and say that's just a growth opportunity. We need to follow the demographics. Obviously, that population will increase, but if we could penetrate a substantial portion of those people who are today uninsured, it would be a phenomenal growth for our industry.

But I think we need to stand back and ask ourselves some questions. There have been a lot of people doing research on this. Why haven't more people purchased? As you get involved in these projects, that's something you ought to be asking

management—making sure that you're going to work on a product that people will really purchase. It's difficult to price these things. You ought to put your effort into something that's going to be successful.

Another interesting thing to think about, from the demographic side, is what type of care will be offered? We price these services today and write an insurance contract that, for our customer to receive a benefit, they're going to have to in force for 10, 15, or 20 years. Things change. Long-term-care products offered 15 or 20 years ago are significantly different from what is available today. But you need to realize that your insurance contract is going to be the same document in 20 years, when you're adjudicating a claim.

Let's look at what types of care may be available. It's been a significant issue to a lot of companies who have tried to retroactively adjust their current long-term-care contracts. It's been the stated reason for a couple of companies to say they have to increase things because they're going to cover more benefits than they originally priced for.

What will these services cost? I think it would be inappropriate to come out with a product today that, when the person needs it in 10, 15, or 20 years, there will not a meaningful benefit.

Now following the demographics again, who are the people who will provide the services? Or will technology take over? Where will we get the service providers? Where will we get those workers? Do you believe the demographics as to how many people will need it? How many people will they be providing care for?

I'm going to digress here a bit. As I was flying down Sunday, I read in an issue of *The Actuary* an article by Jeff Miller and Hobson Carroll. It was on fee-for-service medical care. There was a section that discussed insurable risk. They stated, "Ideal risk for transfer through an insurance contract is one where the risk itself is not affected by the transfer. Further, an ideal risk would be one in which all of the parties to the risk-sharing contract have common interest. Such risks generally involve low frequency, high loss, an insured that is interested in avoiding the claim, and no opportunity for the insured to impact the cost of the claim after a claim has started. While no risk is ideal for insurance, several come pretty close."

Life insurance probably comes in as close as any. Except for a few, most insureds don't want to be dead. Once we get the claim, we know what the check amount is going to be. They can't affect that. As you get into other long-term care, that will be a different story. We'll get back to our idea here.

Again, the risk of the event for the mortality is death—it's very simple. The most complicated process that you do in your life insurance departments is adjudicating waiver of premium claims. We have very long waiting periods—six months, usually. It's very tough to qualify, but once you adjudicate it, it's pretty much closed. You

don't re-open the cases. It's a very minor issue. I think that's probably the most difficult claim that we look at in our life insurance business.

Annuities, immediate annuities or payout annuities, are on the opposite side of death. As long as they're alive each month, we look at it. Here, the typical issue is sometimes fraud. Look to see if the insured is still alive or making those multi-benefit payments. That's a similar risk that you may have in long-term care. Is the insured still alive receiving those benefits? I'm not aware of a significant issue of fraud, but I have heard a few stories where companies go in and change claims administrators. Or they go out and audit the long-term care, and they find that the nursing home was sending out a bill, even though the policyholder is dead, because they knew it was going to an insurance company. So there are some similarities there. I can't say that it's very frequent, but it's another issue to be looking for.

Now I'll review the definition of insured event for long-term-care products, and I'm going to use the Health Insurance Portability and Accountability Act (HIPAA) definition. To pay a claim for a tax-qualified long-term care, you're going to look for someone who's chronically ill. As you start to get into these products, if you're not very familiar with them, you're going to really understand what it is to be chronically ill. According to the federal definition, it's being "unable to perform without substantial assistance from another individual at least two activities of daily living." The next definition, which is the definition in everybody's contract for Alzheimer's, is "requiring substantial supervision to protect such individual from threats to health and safety due to severe cognitive impairment."

Now we go back to and look at the activities of daily living (ADLs). The additional requirement is that you have to have certification from the medical professional that this person is going to have this condition for at least 90 days. Under the activities of daily living there are six that we would think of: eating, toileting, transferring, bathing, dressing, and continence. For the tax-qualified contracts, you have to use at least five of these in your contract.

The "substantial assistance" is typically defined, in most contracts, in one of two ways—either hands-on assistance or standby assistance. Again, there are a lot of subtle differences in those definitions. Practically speaking, those companies today are all on a standby-assistance definition. In pricing those, one study I read said that there is at least 30 percent difference in that. But from a practical standpoint, it scrimps down to the interpretation of your claims examiners to get those people on claim. Another thing is, if a person has trouble preparing a meal, that's not failing the ADL of eating. The actual ADL is eating. So if they can feed themselves with a bowl or spoon, that requirement is satisfied.

As you get into actually pricing the long-term-care contract, you're going to need to find your experience. Compare the contract with life insurance. In life insurance, we're looking at the probability of death. In the life insurance industry, we have billions of claims—billions of dollars of claims paid every year. In 1990 to 1991, the

SOA study contained \$1.5 billion of death claims. That's a pretty significant amount to build up on your study for your own company's pricing.

Annuity mortality has had similar studies done by the SOA, although not as frequently. But generally it's pretty adequate.

The trend of mortality experience is downward. If we were to price product today, look at experience, and ask what we really expect in ten years, we probably would anticipate some mortality improvement. Through different issues of Actuarial Standard of Practice, especially in the illustration regulation, you would not be using that. But if you had any difficulties whatsoever in pricing the long-term care, we have a very robust life insurance community, and we could reinsure most, if not all, of our mortality risk through reinsurance today.

Going on to long-term-care pricing. Again, we want to make sure we look at insured experience. The SOA has a wonderful committee. Through the 1984 to 1993 SOA Intercompany Study, they had almost \$400 million in claims. That was over a ten-year period, comparing that to \$1.5 billion that was in the life insurance. You need to review this, too, with senior management. They may be thrilled, as our company was, to stay with a base of \$400 million. That's very credible. Then they realized that was over a ten-year period. They got a lot less comfort from that.

Another thing to be aware of is that the data was collected over a ten-year period. The contract definitions of many of the companies changed. You were not talking about the same definition of our insured events through the entire time period. They may have been institutional care only. Maybe you got your home care. How did they handle assisted living? There were significant differences in companies in all of these areas of the definition—not only in the underwriting, but in claims adjudication as well. The committee is releasing the next study next summer. There's \$1.1 billion of exposure or claims. That's very helpful. If your companies were involved, I would encourage you to try to contribute. It's very helpful to share this knowledge and experience.

So we have this insured population to price from. Now you're going to price a contract for which you're going to have claims for a lot longer than a ten-year period. You're going to be using population experience. I was aware of every company I ever talked to—every actuary. This ultimately uses part of the long-term-care surveys from the government. That is still the foundation of most of the pricing for the long term—at least the tail part of our business.

Once you've settled all the experience, and you've got the contract definition written, you're ready to actually price it. You're going to need a software package. If you're pricing the life piece, you have a very robust set of canned packages that are available. Setup for a single set of mortality q 's, doesn't need a continuance table, so can you program?

I also want to take a quick look at where you can go for experience. Out of nearly 17,000 members of the SOA, as of the end of September, there are almost 4,000 in the product development section. I was absolutely amazed that there are 783 members in the long-term-care section, so I think there's a tremendous amount of interest in this.

As you get into administrative systems (and hopefully you get into these issues before you price, because they're going to have a significant impact as you go down the road), one of the things, of course, to be aware of, is that your agents will need a special long-term-care license in many states. Is your system going to be able to keep track of those licenses? If you're a life and annuity company, you really probably never cared about an accident and health (A&H) license. If you're like us, though, our products are life insurance, but they have a long-term-care element, so our agents have to have both. We have to keep track of that on our administration system.

Obviously, the underwriting is going to be different from these two contracts. You're going to have many conditions that might have been a subtle rating or might have been ignored in your life insurance underwriting that would be a flat decline for long-term-care coverage. Is your underwriting team prepared to handle this and just needs to be brought up to speed? Or will you have an entirely new team? This will be a significant issue on your assumptions as you get into this.

In the issue of the contract, one area I think is different is suitability. A long-term-care model regulation requires a suitability disclosure and verification by the agent. Many companies are taking the obligation upon themselves, and I think they should, to make sure that they are selling contracts that are suitable for the person. You don't want people spending their last dollar for long-term care. They don't have the money to spend.

One other thing to think about in the billing system is that our life insurance products are all set up for fixed-premium or flexible-premium products. The contracts for long-term care are primarily guarantee renewable. You may increase premium rates if you need to in the future. I wouldn't want to be tied into a system where it wasn't an option for me to be able to increase premium rates because my system couldn't handle it.

Another important issue is flexibility—you'll definitely need this—in a health product. You're going to be regulated at the state level. If you think you need a 25 percent rate increase, ask one of the states. Everybody will be different on what you're going to get. So when you come out with one block of business, you may, in ten years, be treating this as 48 different blocks of business. It could be very difficult to administer when you get to that point.

On the lapse side, if we have a life-insurance contract that's been in the premium payment, we may have an automatic loan provision, extended-term insurance, or

reduced paid-up. For the long-term care, you're going to need to contact a third party who puts him or herself up as a third-party notice, because you may have a situation where "mom" forgets to send in the premium payment, because she has Alzheimer's, and you have to send out a notice to the daughter or the son to remind him or her that there's a premium due. That may be the first indication to the son or daughter. Also, this offer has to go out every two years and re-update these things. These could be new issues for life insurance companies.

From the regulatory side, you may be dealing with a different group of examiners in each state. You may have built up a good rapport with your life and annuity contacts reviewers and know how to get the things through. During your first attempt at this, you will find a lot of issues coming up at you, not only at the time you go into the contracts. You're going to get into long-term-care experience reporting.

On the federal side, the definition of life insurance is 7702—the SEC and National Association of Securities Dealers (NSD). If you've been involved in variable contracts, there are not a whole lot of new or different issues there. But 7702B is a new section that impacts the tax-qualified contract and provides a lot of issues to be aware of. This branches off into three or four new sections of the code to learn and add to your repertoire.

We really need to take our pen and write a big ASOP No. 18 underneath this, because there's a whole new series of actuarial standards that covers these issues. I think, for a life person, I wouldn't necessarily think about how my claim is going to be adjudicated at every moment, and wonder what my underwriting is going to look like. But this is a very big issue in setting rates or doing reserves for your long-term-care product. So, definitely, there is a whole new series of actuarial standards to be looked at.

I have a little quote by Charles F. Kettering, an inventor. He said, "I am not interested in the past—I am interested in the future, for that is where I expect to spend the rest of my life."

I look at all of this and say that it's a whole lot easier to stay in the life insurance side, but I've enjoyed going into the long-term care. Thank you.

MR. ARTHUR J. VERNEY: After listening to Jeff, I'm afraid we may scare everybody out of the LTC industry. I find myself asking why I am involved in this industry. It seems really scary. In fact, doing some pricing work, I have found it to be kind of scary.

My first activity with LTC pricing was pricing a combination DI and LTC product. One of the differences was we were marketing, or we intended to market, to a younger-aged crowd. I started thinking about what the insurance environment might be like for long-term care, or what the services industry might be like once those baby

boomers reach 2040, when they need long-term care. I recognize that it may be a very, very, different environment. So some of the trending and projections are very important in long-term care, and it's another reason to stay awake at night worrying whether you've really adequately priced it or not. My worst nightmare is thinking about the application of technology that's currently being focused on the young people, because that's where a lot of the money is being spent. When you transfer that application of technology to the older people, who will be us, that whole crowd hits retirement age at the same time. They may make retirement homes pretty ideal places to live with altered-reality rooms. It would be more like, "Re-live your youth by going to the nursing home."

Think back to the quotes that Jeff gave. He talked about the insurable event. You want somebody who doesn't want to go on claim. That's pretty true in the life insurance industry. People don't want to go on claim. It's pretty true in the nursing home insurance industry. People don't want to go to nursing homes. There's not a much better gig than being completely healthy and on disability. That's about the best one out there. One fear is that the nursing home industry will start to look more like the DI industry 30 years from now or so.

I'll talk a little bit about the similarities and the differences in pricing DI and LTC. On the surface, there's a tremendous amount of similarity between the two. If you were to pick an alternate product form, DI is the one that looks most like long-term care. There's an insurable event, which is a disablement. You price it. You need to figure out the frequency with which that disablement will occur and then what the run-off of the claims pattern will look like. They both have a fairly steep claims-cost curve, so they build up substantial active-life reserves, which draw off interest. They both have decrements from the disabled status of recovery or death. The result is that you need to monitor your disabled-life reserves. There are similar considerations for reserves and interest and lapses and expenses. So on the surface, they're very similar.

As I found out when we started to do more pricing, there are some key differences. If you sit down at your DI-pricing model to price the long-term-care product, you quickly run into places where there are challenges for you as a pricing actuary. I'll talk a little bit about the product structures—modeling structures that you tend to use, and a little bit about the differences between data and assumptions. Then I'll talk about some regulatory considerations.

The first difference that you run into is the benefit form. On a disability policy, the amount of the benefit that's payable, once an individual goes on claim, is a fairly predictable amount. For the long-term-care business, if it's an expense-reimbursement contract, the person may be qualified for claim, but you're going to pay the lesser of the face amount, in essence, and the amount of the expenses that were incurred, so you're immediately into projecting what the expense level is going to be for a given level of face amount. There are contracts out there, and probably increasingly so, that are indemnity-model long-term-care contracts. Those

contracts really do look an awful lot like DI pricing. Most of what I will talk about will be more focused on the expense-reimbursement model.

The benefit is limited by the amount of the expenses that are incurred. Then, to make it a little bit more exciting, the amount of the expenses may vary, or the amount of the limit of the expense that can be reimbursed may vary, by the nature of the service that's being provided—typically, nursing home versus home health care, then some of the ancillary benefits.

There's a key difference in the benefit limits. On a DI policy, you have a fixed monthly amount, and then you have a benefit period on a long-term-care contract. There tend to be internal limits in the form of daily maximums and then lifetime maximums, in terms of the amount that you can collect before the policy is really paid-off in its full amount.

We talked about qualifying for benefits—the ADL designations. I mentioned that the expenses may cover a whole host of different services, and the benefit may vary, depending on which channel the services come in through. So you need to find a way to incorporate all of those into your claims-cost assumptions.

There are a couple of interesting and creative provisions that have come up in LTC designs.

- Inflation projection is not that creative, but it does function differently in the long-term-care market. The inflation doesn't kick in at the point the person goes on claim. It kicks in as of the day the policy is sold.
- Non-forfeiture benefits are not very common in DI, but they're very common in LTC.
- Shared care—doing some amount of joint pricing—is something that hasn't really been done in DI before.

Premium structures are a little bit different, but that's pretty well handled by any modeling system that you have. As I mentioned earlier, the benefits are very similar—you become disabled and then you recover or you die to come off of claim. So that works pretty much the same.

Most long-term-care pricing models will look at skilled nursing facility (SNF) care differently than home health care. I think the most common way to price it is to price one, then the other, and add them together. It's not rocket science, but there are places where you need to make sure that you are recognizing how those benefits will interact with each other. Maybe the other ancillary benefits are priced either through spreadsheets or by loading your base benefits up and then solving for premiums or by developing your premiums and then loading them up for some of the ancillary benefits.

The lifetime maximum is something that gives you opportunity for some actuarial judgment. Take, for example, two different claims. In one, you are paying out \$50

a day, and you'll run out of your maximum benefit in how ever many years. In another, you're paying \$100 a day for the same maximum, and in essence, you could run out in half the time. A lot of the data is presented in terms of average lengths-of-stay. You need to covert that into a continuance curve and make some assumptions, in terms of what the utilization of benefits will be, how that will run off, and actually when you will hit the lifetime maximum.

A few differences on premium. There are limited-pay LTC plans. Typically you can have paid-up, at some point, a ten pay. Or, with one of the designs we did when we were looking at the younger market, we had it paid-up at age 65, so that once you get to the point where your income has gone down, you don't have the expenses associated with it. It also worked well in employer-pay situations. One of the key differences we didn't think about initially was that, if you price the LTC benefit in two pieces—the nursing home and the home health care—an individual going on claim in either channel will qualify for waiver of the full premium. So you need to make sure when you're pricing the waiver of premium, that you don't overlook the claim on this side, with whatever premium needs to have some waiver premium hitting the benefit from the other channel.

Then to take waiver one step further, there are joint waiver programs where, if you've got policies sold to both members of a couple, when one goes on claim, the other one's premiums are waived as well. So that gives you the challenge of—and again, it's a rather minor piece of it, so fortunately it's not going to make you or break you—recognizing that you need to add some additional premium in there to be waived on claim.

On the data side, things are getting much better. From what I heard this morning, things are going to get a lot better in terms of what we know. But one of the challenges has been that, as Jeff alluded to, a lot of the experience is population data. And here we are pricing insured lives. Will insured lives act differently from general population lives? I think you can argue that they will. But the population data gives us a lot more exposure. It's also been advantageous, in that the insured population data has tended to be in the select periods. So to the extent that we're looking at insured population data, you need to make sure that you're careful about whether you're getting underwriting impacts flowing through there that won't be there in the long term on your claims costs.

Utilization is a key assumption, especially on the home health care side. You've got a couple of things that will drive less than 100 percent utilization. The first may be that they're just non-occurring expenses as high as the face amount of the policy. That really applies to nursing home care as well. But the second element is that they may not opt to receive the home health care services. Very commonly, an individual prefers to have a spouse take care of him or her, rather than a stranger. So at the first stage, the spouse will take care of his or her partner, even though the individual could have qualified for benefits. At the second stage, the spouse will get some outside help, and then start moving into other facilities.

So, recognize that the utilization may be less than 100percent, but may trend up over time. Utilization will also vary according to the inflation assumed and the inflation provisions in the contract. If you have a low rate of inflation, and you don't have inflation protection in the contract, your utilization tends to go to 100 percent, as inflation takes the expenses up in excess of the limits in the contracts.

Medical underwriting is very important. Not that it's not important in DI, but it's very important in long-term care—especially in underwriting the older-age risks, where the health deteriorates more rapidly. You need to underwrite the cognitive elements, as well.

In regard to trends, not only do you have trends of morbidity and incidence rates and health trends, you also have trends in terms of the services that are being provided in the environment in which the individual is living. So in trying to be a real futurist, what I found is that, in terms of projecting that environment. Try to make your contracts flexible enough, and cover conditions, rather than specific services, so that your coverage will apply to individuals as they get older. It will still be a robust contract for them. You can price to it because, whether they get this service or that service, the event of the ADL disablement is the same in either event.

Mortality is a little bit more significant in pricing long-term care, mainly because your policyholders tend to be older, so mortality is a larger factor.

Lapse is very important in pricing long-term care. It's probably the thing that got the least amount of consideration in the very early days of pricing long-term care, which came back to grab some of the companies that did some of the initial pricing. In doing some research on it several years ago, as we were getting involved in pricing long-term care, I spent a fair amount of time at the insurance department going through rate filings. I found filings where lapse rates—ultimate lapse rates of 12-15 percent were assumed, and at that point already, rate increase requests were coming in. The justification for the rate increase was that the lapse rates were down well into the single digits. Unfortunately, when you're dealing with regulators, and you do much of it by mail, they don't always understand exactly what your point is. But the annotation in the margin on this filing by the rate was—the people in the insurance department were trying to get a rate increase, when they've got better than average-class experience, which is better than assumed-class experience. They denied the rate increase. So not only do you have the risk that your lapse assumption won't come true, but you've got a risk that the regulatory that you're pleading your case to won't understand that a low lapse rate has turned out to be bad news for you.

Underwriting expenses tend to be a bit higher, mainly because of the cognitive testing. There are higher not-taken rates in long-term-care coverage.

Claim expenses are also a bit higher, because you're dealing with the expense-

reimbursement element. You're looking at expenses from several different channels. Many long-term contracts have a care-management plan associated with them. Some will vary the amount of the benefits, depending on whether the service you are receiving came in through an approved plan of care.

The plan of care is an interesting concept. It works well in long-term care. At times I wish we had something more like that in the DI world. We tried, but we haven't been too successful at it. But a plan of care gives you a chance for a win/win situation with the policyholder. Very often, knowing how to get care is a challenge for the policyholder. The plan of care also helps you manage the expense and make sure that the service dollars are being spent wisely.

Net investment income, because you are building up fairly significant reserves, is also a very important assumption—especially if you consider pricing in the younger-age markets. If you're looking at a benefit that will be payable, perhaps on average, 40 years out, then the net-investment-income assumption can be very important.

Regulatory considerations. I'll just hit a couple of them. Reserving is a little bit different. There are no standardized tables yet. I know that's a hot topic, and there may be standardized tables at some point, although I suspect there will always be challenges around the application of a valuation table, due to the variances in the benefit forms. In your reserves, you can assume some limited number of lapses. In the absence of a lapse assumption on your valuation, your reserves just become gigantic, and it really becomes an impossible pricing problem. So you are allowed to assume some level of lapses.

Tax reserves vary, depending on whether it's a qualified or a non-qualified. LTC is a one-year preliminary term, where the standard tends to be two-year preliminary term. If it's qualified, you can use the one-year preliminary term. If it's non-qualified, you need to use the two-year preliminary term.

Loss ratios are a little tougher on long-term care. They tend to run 60 percent to 65 percent. There are also a number of funky regulatory demonstrations that show that, not only are you hitting your loss ratio, but you're hitting it in the right combinations, so they tend to ask for some additional loss-ratio demonstrations.

There are some regulatory considerations around commissions. Many states limit the amount of keeping that you can do with the commission scales. It's not really a pricing consideration as much as it is a design consideration.

Because of the nature of the population to which long-term care has been sold, there's a lot of language around mandated benefits, mandated definitions, and prohibited benefits.

One interesting thing in the regulatory process is the focus of the regulators. They

do have the normal focus of protecting the consumer from price gouging on the part of the insurance company, but with some of the rate increases that have been applied for in the last couple years, they also have a very strong focus on protecting the consumer from future rate increases. They want to make sure that you're charging enough for the coverage, rather than charging too much for the coverage. There's a lot in the literature these days about rate stabilization provisions and contingent non-forfeiture benefits. If you go after a rate increase, certain rights get triggered that they can move to lapse and get non-forfeiture benefits, even if they didn't start with non-forfeiture benefits.

Risk-based capital (RBC) still pretty much follows the DI provisions. I'm actually not sure with the work being done in RBC, whether we'll get long-term-care RBC, but from my perspective, using the DI model is fine.

MR. RONALD M. WOLF: How does long-term-care pricing differ from medical expense pricing? On the long-term-care side, with the type of product that we're looking at now with inflation, there are care settings other than the nursing home. On the medical side, we're talking about comprehensive plans, not supplemental plans. Medicare supplement is kind of a question mark. I know some of you in the audience are in the Medicare supplement business, and there will be a few places where I'll make some comments about that.

I've been doing medical pricing for quite some time in my career, and have been doing long-term care for a shorter period. I definitely wanted to think about this a little bit more. Why compare LTC and medical pricing? Obviously, we want to do as a good job as we can at whatever pricing that we are doing. But we have some serious long-term stakeholders here. Certainly we, from a professional point of view, want to do as good a job as we can. The people who are taking the risk, insurers, presumably like to make a profit. We have compliance to deal with as Tad mentioned. But even more than that, we want to sustain and enhance a private market for the people who, as Tad pointed out, are really hanging on to their policies. With lapse rates and people living longer and longer, we want their long-term-care benefits to be there for them when they need them, which will be quite a while for them.

What I'll try to do is set forth the issues and give you a few thoughts of my own. Then hopefully that will give you food for thought to ask questions at the end of our presentation.

The first issue is form and horizon of premium. Long-term care obviously involves being level age at issue, which, as we know, has an increasing emphasis on adequacy. The liabilities will last for a very long time, and we're kind of taking a long-term bet, even though we have the right to increase premiums. For medical coverage, it's typically one year at a time. Medicare supplement is somewhat of an exception. That was put in there primarily for the fact that it's guaranteed renewable, although individual new medical-expense products on the market now

are pretty much guaranteed renewable as are small group products. To give you a quantitative idea about horizon of premium, it's present value of future premiums divided by one premium issued; or, I guess, a measure of your average of lifetime.

How about investment performance? There's obviously a difference. As Tad has pointed out, long-term-care investment performance is a very key financial element. Investment strategy, asset adequacy, and cash-flow testing are essential. For medical insurance, investment income is not nearly as significant a factor.

One of the things I like to do in pricing is a 100 percent-of-premium profile of the product issued.

For the next subject, how about trend as a point of comparison in long-term-care and medical expense pricing? Our trends for long-term care can definitely be long term.

- Mortality/increasing longevity—living and staying healthy and self-sufficient longer
- Changes in landscape (cure for Alzheimer's and fewer caregivers for Baby Boomers)
- Basic frequency and severity trends
- Effect is more complex, due to guaranteed renewable (GR) level premium structure

The things you see listed there don't need any further attention. In regard to the effect of this being more complex, I offer the word profound for long-term-care, due to its guaranteed-renewable, level-premium structure.

Whereas, for medical trends, the employed are more short-term, in regard to managed medical. I guess my point there is, who really manages the trend risk? Is it the risk taker? The health company or health plan? Is it the insured? We've heard a little bit at this meeting about defined contribution schemes for medical insurance—typically, in a group setting, though. What about the long-term-care effects for medical insurance of high short-term trends? In medical pricing right now, we appear to be in one of those periods where short-term trends have spiked up. We've heard some comments at this meeting from some folks. We think they're coming down a little bit. But trend can lead, in medical care, to a situation where medical care becomes an even greater percentage of gross national product. At some point in time, does that essentially have to end? Or does it become more likely it will end with something like national health care?

How about available data for pricing long-term care and medical? Tad alluded to this a little bit. Insured data to price our long-term-care products is still largely in early durations, although that's changing. Does that lead us to say that our initial assumption should be conservative? I would think so. Just how conservative is the real question. Or maybe the real question is how do we know if something is, indeed, conservative? Certainly, if we're going to sell on any business, we can't be overly conservative. Experience studies are essential then, if we don't have exactly

the data that we need. My major comment here is, let's make sure we're setting up the wherewithal—the data records and the facilities—with which to study our experience (long-term care) when it becomes available.

Benefit design and premium relativity. A couple of words I use here are business mix—for long-term-care premium relativity by age, comprehensiveness of benefits, and inclusion of inflation. Just look at a long-term-care rate sheet. We've got all ages, all of your benefits with and without inflation, lifetime coverage, two-year coverage and the like, and you'll see a really big range of numbers. If you don't get those relationships right, the market, as we know, will spot a bargain, and you may pay for it. So things like competitive-rate-analysis-experience studies as detailed as you can make them, and quick action is required to avoid problems in that area. I don't think we have that issue so much with respect to medical-insurance pricing, although the comment I made there was more from the viewpoint of the medical rates themselves. It has always amazed me when risk characteristics such as benefit level and area appeared to be relatively close to one another. When we have done rate surveys, I've always been amazed at the diversity of rates for the same risk that is out there in the market. To a certain extent, that's true for long-term care, but I don't think it's as true.

How about provider relations? You might have some differences of opinion as to some of these comments. PPO-type arrangements have been slow to emerge in long-term care. That's kind of my notion about it, but you may have comments otherwise. If we talk about capitation with a cost level of real control, I think that's more in the continuing-care/retirement-community product line. Certainly for long-term care, having a care manager involved and having a plan of care is very important to managing the risk—so are considerations for medical. Gatekeeper-type plans are still viable, although heavy capitation of medical plans is pretty much gone, and again you may disagree on that. But I think it's right. Certainly for medical pricing, pharmacy management is very hot right now. That's not much of an issue for long-term care.

The last one is a bit interesting. Predictive management of potential high-risk insureds is a new frontier. I attended a session earlier today. The panel was entirely non-actuaries, and one party in particular talked about some predictive modeling they were doing, which for example, would identify out of an insured population a group of people who have a coronary disease problem. Let's say that there were 12 of them. The modeling that this company would do includes saying, of those 12, here are the six people that we think are most prone to have a big medical claim in the next year. Once those people are identified, let's go and apply medical management, so we can avoid having those claims at all—or at least postpone them. If something like that works, and I think it's just starting for medical expense, I would ask, how about down the road? Would something like that work for long-term care? Maybe we'll find out.

This is a little bit more philosophical. But how about expectations of customers?

Long-term care versus medical insurance. As a society we have high expectations for insurance, and I think we have high expectations for medical insurance. I regard medical as a three-legged stool. We want great quality for our medical care, and we don't want to have any hassles. We want immediate access to it. We want it to be affordable. I think balancing those three things really causes a lot of consternation and a lot of issues for medical expense. For long-term care, do we have those kinds of expectations yet? Do we have those kinds of issues emerging? I think not, because a lot of our sales have not yet been to those at advanced ages, so a lot of the people that we have in force right now haven't even had a claim yet. So once we get to the point where we're paying more claims on more people, will we have the same types of issues that we have for medical coverage and something like a patients bill of rights for managed care?

Another question that's a little bit more philosophical. How about the risk/reward relationship for long-term care? It's longer term. We don't have quite the data that we need. The question here is, is it right to raise rates enough to compensate for the risk of potentially getting stuck with a really underpriced block of business? I tend to be a bit conservative in things like that. Obviously, there are plenty of people in the long-term-care market who think that the risk/reward relationship is just fine, and they're comfortable in being in that market.

I think most of you know that long-term care is somewhat tax-inefficient—a little less tax efficient than medical insurance. So therefore, you need to be careful about your after-tax pricing and take the appropriate tax parameters into account.

FROM THE FLOOR: I would like you to comment on the differences between pricing a long-term-care stand-alone versus a long-term care as an accelerated benefit from an LTC policy.

PANELIST: I see the pricing of the combination product as the pricing of the acceleration of the death benefit that we're going to ultimately take. But what I had to price in is what the cost of that time, value, and money is. I priced it primarily so that the single-premium basis was a relatively low net amount of risk. We don't offer it on a term platform, as I hear they do in some other parts of the country or in the world. That company is not considering pricing this on a term platform. But they have very little reserve buildup in a high net risk.

PANELIST: This is also a change in the marketplace. It used to be, 10 and 15 years ago, that this was a very popular benefit and there was a lot of activity characterized similarly by complete lack of sales success. The only place where I've seen actual sales success in these kinds of combo products (in life insurance) has been in the single-premium, older-age marketplace. I think that there's a lot of interest right now to see if that success can be replicated in the lower-repetitive-premium market place. Some companies in this room actually have those products. If anybody would like to discuss actual sales, that would be somewhat interesting to

listen to.

PANELIST: I'd highlight two other things. One is that when you accelerate the benefit off of a life policy, you've done two things really. You've paid out part of the benefit, but you've also changed the contract going forward. So you've got a reserve release, in essence. You've got new premiums going forward, and you have new benefits going forward on the life contract. Presumably, you've taken an unhealthy life out of your active-life pool and reduced the benefits. That's a good thing. So in looking at the claims cost, you really need to look at the savings you get on the life contract, offset that from the cost of the long-term-care contract, and price the difference. So that adds another degree of complexity to the pricing process. The other complexity that it adds is that every time you pay out a portion of the life benefit, you need to send a statement to the policyholder giving him or her all new values for the life contract. So your administration has just gone up exponentially from the life contract or from the long-term contract really. The combination has much higher administration costs. So you've got administrative considerations as well.

FROM THE FLOOR: How do the benefits on the rider to a lifetime insurance policy compete with stand-alone LTC policies that are out there now?

PANELIST: What do you mean by the benefits?

FROM THE FLOOR: The maximum benefit amount payable on the lifetime of the policy. Obviously it was like a life policy if you had that on as a rider. You're going to drain your benefits, and there's a very specific limit that you have there. How did the LTC policies compare to that? I'm thinking about disability. I've never priced LTC, but with disability, you've got the benefit period. But you can go off benefit and come back on. Potentially there's a lot more exposure there.

PANELIST: You're talking about the lifetime benefit that is offered, obviously, with the face amount—the fixed face amount of a life insurance contract. You can't divide that up and pay it out over lifetime of the insured if you know how long that might be. The combination contracts are paid out at 2 percent or 3 percent per month, and you just fix period. But I don't think that's very different from the 2-, 3-, 4-year benefit contracts that are on the stand-alone contract. We offer riders and competitors offer riders that will extend the path that accelerates into it. That's more of a traditional combination product.

PANELIST: On the stand-alone products, there are typically standby restoration of benefits features that will allow you to come back in and rebuild your pool on the acceleration-rider form. So I think the structures are a little bit different, but the concept is the same.

FROM THE FLOOR: One reason that this product is difficult to sell is that the

benefit is so far in the future, and the client really doesn't consider what it's going to be like and feels that maybe it will be covered elsewhere. But is it possible to convert this into a participating-type of account? Like a medical savings account, where you take out term premiums from an accumulation account to pay for nursing home events, in relatively short- to medium-term? Eventually, the product builds up accumulations that will pay for the maximum amount and then deliver the maximum amount. The insurance company basically makes money by taking out a percentage of reserve for the way different annuities are. You get a piece of the pie that way. It becomes an accumulation account that's like a medical savings account. Is anybody thinking along those lines?

PANELIST: I haven't heard anything along those lines. I've been to several sessions in the last two days that have covered the topic of long-term care with other products and in combination. Just from your question, it's clear that there's tremendous room for creativity in product structure. It's a double-edged sword. The flip side of that is, as you do that, the pricing exercise can be fairly overwhelming. It adds a lot more uncertainty. The other thing that we found when you look at some of the more unique features, is that cost is a real consideration. As you mentioned, it's a challenge for us to drive sales to the younger-age market, because that market doesn't see anything of real current value. It's hard to do that kind of planning for that far in the future, if you don't know that you're going to have any use for it when the time comes. But if you start putting in guarantees, benefits, or too many options, you drive the cost way up, too, which makes that work in the other direction for you, in terms of trying to sell in the younger-age market. So it's a bit of a choice, I think.

PANELIST: I think we're really acting quite well as actuaries in developing and designing these programs. Two things that I think would be big challenges to overcome would be distribution—the more complicated it is, it's even more complicated to explain to our people who sell and buy the stuff. The second is the regulations. HIPAA right now actually limits rather than increases flexibility type.

PANELIST: As I mentioned earlier, we combine long-term care with a DI product, which does seem like a no-brainer. They're very similar risks. In essence, it gives you lifetime protection against disablement. It just changes the nature of the benefit in the working years from the retirement years. In developing that, we got excited about how well that would be received by the market. We didn't fully anticipate or think through the distribution factors, which has come back to us in terms of its being complicated. So we've got that complicated criticism on something that, to us, fits together nicely. If you start getting too creative, I think you exponentially increase the complication exposure.

FROM THE FLOOR: I'd just like to make some comments. First, about 15 years ago, I suggested to my company that we go into this market. The president said it wasn't an insurable event. The only impediment to going into a nursing home was the cost. I mean you go in, you get fed, you get bathed, and you veg out. If there

weren't a cost, there would be a line waiting to get in. At that time I had not been either a visitor or a patient in a nursing home. But I remember the scandals of the '70s, with the mistreatment of these residents. I think that one of the issues Ron brought up was the expectations. That's fear. I mean, you grip the side of the bed because you don't want to be moved, and they break your finger. They'll hit you to make you let go. The signs are there of the rights of the patient. I think any actuary that works in this ought to, if you haven't done so already, visit a nursing home. I've been visiting the local one lately, and you know it's the saddest thing. These people are sad. I've never even seen anybody reading in there. They're just stretched out.

My question is: Is there a problem with people miscounting terminations? If you're in a high-class nursing home, and then the money runs out, and you are sent out of the home, is that a recovery? I mean, have we lost something there in the data? Because one of the impediments to marketing is that people think, "Medicaid will pay for it. I don't have to worry about this." Well, Medicaid will pay for it, but I think there's a different classification among nursing homes. I would like to go into the best one that I could. In fact, while this panel was going on, I was trying to think which of the two failures I would choose for myself. How would you rate these in order of your own preference? I'd like to hear the panel comment from a direct-experience point of view.

PANELIST: I think there have been some termination re-entry issues that have occurred in the past.

PANELIST: I wouldn't think there would have been that many, unless the benefit period or the benefit amount was relatively small. I think there have been some.

PANELIST: I think there are actually quite a few. The Society published a paper on this. Some of the corrections were to bring together the terminations and re-entry from the same person and get rid of the multiple accounting. So there was quite a bit of adjustment. It was like 20 percent or something like that. It actually works in opposite ways, but it was a pretty big adjustment to the statistics. I think that right now, going from the institutional care to the alternate care, I'm curious to see how the statistics are being calculated and collated on this problem in the current studies, but I would think it is an issue for some companies to provide accurate data and interpret correctly.

PANELIST: You're now touching on a subject that's been tough for us all to grapple with. Several of us were on the Actuarial Standard of Practice No. 18 a couple of years ago. We said the actuary must consider assisted-living facilities. So when we came along in the year 2000 and published the second edition of the inter-company study, we felt we had to put together some data associated with assisted living, because the actuary must consider it. As we looked over the coding that we had associated with the data, we didn't have any data upon which to provide anything that would be meaningful. Where are people, and how do you count them and all?

I'll just make one observation relative to the Wilkins Table, which was the first one the experienced committee put together. Yes, we did know that there was double counting and that the data that's been coming out so far on insured lives says that the incident rates are much lower than what was reported in that study. But the continuance table is showing much longer. So we're getting them added together now, on the insured lives basis, where we could not on the public data.

MR. JOHN CATHCART: I was wondering if the panel would comment on reserve requirements for long-term care versus other products, and the implications for pricing.

PANELIST: Well, obviously for life insurance, we have a pretty clear understanding of what steps are required for the life insurance side. But when you get to long-term care, there is some guidance, but not a lot of guidance. We have spent a fair amount of time over the last couple of years going through what we're doing on our own modeling, which was to build a double-decrement model, to simplify that to a single-decrement model, and to hold the reserves in addition to our life reserves. It's a fairly complicated issue, but we have built up some experience and have hopefully satisfied the regulators.

PANELIST: I'd say the main difference is that, from a DI perspective, you don't have valuation tables to use. So you're using your actuary's best judgment, and you have to address things like whether you're going to load margin into your pricing assumption for reserving purposes. Are you using a one-year preliminary term instead of a two-year preliminary term? Another major difference for LTC versus DI is the last assumption.

PANELIST: I guess I've seen a number of companies use different slopes at the older ages, and that has a very material impact on reserves and pricing. I think that's one of the tricks to justify a lower premium. I think that I'm probably not speaking just for myself. I think the industry may be underpriced, and that might be one of the ways that we kind of convinced ourselves that we're okay.

FROM THE FLOOR: I'm curious as to whether in your pricing or when you looked at pricing of long-term care versus medical insurance, if you considered the potential cost-shifting from that acute to the chronic sense. One of the things that I observed, for instance, in nursing homes, when I visited them years ago, was that you tended to have varying levels of care. More recently, if you've visited nursing homes today, with the advent of assisted-living facilities, people in nursing homes are much more completely disabled. I think there are two reasons. One is because you've got the assisted living where you've got the level ones and twos. Those are the least disabled. I think the other thing is, as a result of the diagnostic related groups (DRGs), people are much quicker to move the patients out of the hospitals into nursing homes for discharge planning. More recently, Jim and I were in a group with some providers where they talked about how the length-of-stay in some nursing homes has really significantly decreased, but it's because they're seeing a

much more disabled population. Have you looked at that?

PANELIST: You're saying people are more disabled? They need more intense care when they go into a nursing home?

FROM THE FLOOR: In the nursing home—because one of the things I'm concerned with is some of the cost shifting from the acute side to the chronic side.

PANELIST: The issue that was raised is the problem of people who go out of hospitals and now make up most of the residents in skilled facilities, because of the way the government reimburses the hospitals. The question is that, from the medical side, as an insurer, are you getting involved in a lot more of those payments to nursing homes under acute shifting? And how is that impacting your pricing versus long-term-care pricing?

PANELIST: Your question, then, is: Is that affecting your medical pricing?

FROM THE FLOOR: Well, in some ways, I'm thinking it could affect both. Because I'm worried about it affecting the long-term-care pricing, particularly if there is a movement toward short-term elimination periods.

PANELIST: I don't think that's much of an effect, depending on policy benefits for medical care. But I certainly think it could be an effect for long-term care.

PANELIST: Well, the interesting question is, is medical care paying for that? Because long-term care rarely, if ever, has benefit-coordination clauses with, say, group medical, so the people who are in acute recovery have the opportunity to make money out of that process, with the long-term-care policies.

PANELIST: I don't think I'm familiar with it—whether you call that a triage. But I don't see that as a major issue.

FROM THE FLOOR: What types of non-forfeiture benefits are available?

PANELIST: I think the industry is pretty much converging on a reduced paid-up format, where you take the amount of premiums that have been paid on the policy to the point of lapse, and you provide a benefit pool—a money amount for that amount. So it's a smaller benefit on a paid-up basis.

PANELIST: I think the issue might be, to the extent that the consumer gets a surprise, the company gets a surprise on the front page of *The Wall Street Journal* about raising rates. To that extent, the customers feel that they haven't been treated correctly. They paid premiums for a long period of time, and then all of a sudden the rug is pulled out from under them. Which actually brings me to the risk I believe is most crucial to long-term care, which is the market conduct—litigation

risk, to the extent that some people believe that the industry might be a little underpriced. To the extent that rate increases are going to happen, and we have an older age population, which generally gets more protection, we may be seeing something going forward, which is a big risk.

FROM THE FLOOR: Could you discuss the group long-term-care products? This discussion has mainly dealt with individual and, of course, how pricing things at the younger ages gets to be more complicated.

PANELIST: I haven't thought about group, other than the fact that you would sell it at a younger age. I suppose it would have impacted some of your expense assumptions, as well. You'd have more level-expense pattern. Your lapse experience would probably be different. But I think the major difference is the younger ages, which drives a couple of things. It makes your net-investment-income assumption very important. It makes your lapse assumption very important. It also exacerbates the data problem, because we are starting to develop a credible amount of older-age morbidity data, but not much in the younger ages. So, your challenge, in identifying your claims cost, is really a lot tougher at the younger ages. I would think that would be a challenge in the group market.

PANELIST: I'm not involved in the group market at all, so I couldn't comment. But I think there is, at least from what I've heard, a significant amount being sold in a group.

PANELIST: The group insurance market tends to like premium stability. So in many ways, they're looking for adequacy of premiums, and they're looking not to have to raise rates. There may be a request for proposal (RFP) that goes to a benefits consultant to help with the placement of that product. In fact, rate stability is a lot more important than rates. So that's one comment in general. The second is isn't the federal government now going to be offering this to its employees? I think they will have more long-term care sold in a group environment over the next couple of years. I think that will be the prototype that a lot of people will watch.

PANELIST: It's is to be primarily volunteer coverage, though, almost exclusively.

PANELIST: I would expect it would be, because the benefits tend to be post-retirement, so the format would be such that you'd have a paid-up policy at the point you retire—or whether the coverage continues for retirees, I guess.