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Session 6PD
Trends in Long-Term-Care Product Design and Pricing Issues

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Panelists: ANDREW J. HERMAN
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Recorder: ANDREW J. HERMAN

Summary: Panelists discuss the latest trends in long-term-care product design and pricing issues and then invite attendee comments and questions. Panel topics include:

- *Product features*
- *Approaches in setting morbidity assumptions*
- *Approaches in setting lapse rate assumptions*
- *State regulatory update and impact on pricing issues*
- *Current trends and theories in long-term-care underwriting*

Mr. Andrew J. Herman: This session has been designated as a panel discussion and an open forum, so we're going to make every effort today to hear from the audience as well as our three panelists.

We're going to discuss current long-term-care (LTC) insurance product features, pricing, and regulatory issues. Our first panelist will be Bob Yee. Bob will present his perspective on future market trends as well as current product features and what's going on in the market today. He may add his perspective on the ultimate LTC product. Bob is a risk manager and actuary with GE Financial Assurance's LTC division in northern California, and he's truly an expert on all aspects of LTC insurance. I had the pleasure of working with Bob back in the early 1990s. Today when I assured Bob that I learned everything from him, he laughed and said that's old news.

Our second panelist is Roger Martin. Roger currently is a second vice president and LTC actuary for UNUM Life Insurance Company of America. He's responsible for all actuarial-related functions within LTC insurance, including pricing and product development, valuation, experience studies, financial analysis, actuarial modeling, and capital management. Roger has been with UNUM since December 1996. Roger's focus will be on the evolution of LTC insurance from UNUM's perspective. I'm sure many will find his talk interesting, as UNUM has been a leader in LTC product innovation. Roger also will touch on underwriting and pricing considerations and how they are unique to the UNUM product.

I'll be the third speaker. I'm a consulting actuary with Wakely and Associates Inc., out of Clearwater, Florida. My talk today will be on product pricing issues and techniques. I have to apologize that I'm going to give away only a few of my secrets. With that said, let's get started by hearing from our first panelist, Bob Yee.

Mr. Robert K.W. Yee: Every time I speak in a group like this in SOA meetings I always get a little bit nervous, but at the same time I'm very excited because there's a room full of LTC experts. I'm going to talk about three topics fairly quickly. First, I'm going to do a survey of current product features, and then I'm going to go into future design models. I use the word models because I think quite a number of them are really experiments in products, and some of them are relatively new, so I just call them models. Third, I'm going to touch briefly on the potential future regulatory impact on product design.

About a month ago I did a review of 14 top individual LTC insurance carriers. I ignored the group products because they're usually on a case-by-case basis, and also they don't really have the bells and whistles found in the individual products. I thought it would be a good idea to include one group product anyway, so I did include a Met Life product since it competes in the individual market. What are some of the most common features that you find in today's market?

The top three I found with a large majority of the 14 carriers are marital discount, homemaker services, and alternate plan of care. The marital discount makes a lot of sense because couples usually have better experience, as a lot of carriers have found. Homemaker services coverage also makes a lot of sense. Because of Medicare coordination, this is a true home healthcare benefit. I'm glad to see that alternate plan of care is becoming more and more popular, and it is like a catchall type of benefit. For those not familiar with the term, it's really a provision in the contract that says that if the insurance company, the claimant, and the doctor all agree that certain benefits are reasonable, then the company will pay for it.

Going along with some of the more popular features are coverage of issue ages 80 and above, care management, and coverage of home care not from an agency. I'm very glad to see that companies are using care management as a benefit as well as a tool, and I think coverage of home care not from agencies coupled with homemaker services makes it a really good consumer feature.

Some of the middle-of-the-road features are sales of nonqualified plans (in addition to tax-qualified) and the weekly/monthly maximums for home care. I like the weekly maximum because it seems like another natural extension of daily benefits. The equipment benefit is one that I really believe in because I think it does help keep people independent and at home. A lot of research studies basically support the idea that when you give people equipment and so forth at home, that really maintains their independence.

I think some of the other features are less popular mostly because they're relatively new. The first one is the lower price plan. A couple of carriers have come up with a plan that has more restrictive benefits and lower cost, and it's currently targeted for lower income applicants and may have more benefit and premium flexibility. I'll talk a little more about survivor benefit and joint life later. I am aware of more than 3 companies offering limited benefit premium plans, although out of the 14, there are only 3. Limited benefit premium plans are becoming very popular and most of the new filings that I've seen have this feature, so it's definitely going to be more popular. Coverage of informal care is a fairly new feature, and only two carriers seem to be offering it right now. It's somewhat difficult to price, but I think it's very interesting. The last one, contingent spouse rider, is another very interesting feature, although there's only one company offering it. It's a very interesting pricing exercise, if nothing else.

I want to mention some observations from this review. Obviously, this is a snapshot so these companies are in various stages of product freshness. I think in about six months or one year, you'll see more common features appearing. What I have observed over the past five or six years is that there seems to be less variability in benefits now. All the major carriers have, at least from the consumer perspective, about the same features, so it seems more and more difficult to distinguish product features by companies. Some of the carriers are beginning to take what I call the lowest common denominator approach—basically offering a whole broad spectrum of benefits based on the specific plans they offer. Three out of the 14 carriers have more than 14 of the 21 features in their product offering. Companies are broadening out less specifically in terms of what they offer, so the consumer has a wider choice of benefits.

The other observation I have is that it seems like some of the newer benefits are targeting specific customer segments. The most obvious segment is couples, targeted by the marital discount and joint life coverage. The contingent spouse rider targets married couples for a good reason, which is that spouses tend to have better experience. Another example is the limited premium plan. I think it's designed mainly for certain tax advantages. There seems to be some sort of move toward customer segmentation.

Finally, we must not forget that product features are just part of the customer's value equation. I could name three other areas that make up why one customer would choose one company versus another. The first one's obviously price. Price usually goes up when benefits go up, but in this business you usually get what you pay for, so that's a big consideration. The second one is brand. Rate increase history is becoming important and well-known nowadays because of some of the regulatory requirements. The other consideration of brand is obviously long-term commitment to the business. The third one is service and, in particular, claim service. Most of our policyholders want to get paid when they think they are on claim status, so sometimes it's very difficult to argue with them, especially the elderly group.

What are some of these specific features? The first one, joint life coverage, is fairly new. I've seen it just starting to happen in the last couple of years; basically, it's no different from regular joint life insurance in which a couple shares the pool of money. One design type allows either insured to access the pool of dollars (either one of them or both of them together) up to the maximum dollar amount. The other design is that each spouse buys the same plan and if one exhausts coverage, then they can tap into the other spouse's coverage. A lot of the offerings come with a paid-up survivor benefit that can be conditioned on both spouses persisting with no claims for the first seven to ten years. The policy becomes paid-up when one of the spouses dies. It could be offered as an option with extra premium, or it is sometimes included in the premium.

Next is the contingent spouse rider. This rider is intended for the situation when one of the spouses is declined coverage. In this case, you can purchase this rider for the uninsurable spouse so that when both of them are eligible for benefits the rider pays a benefit contingent on the base policy paying benefits to be primary insured. It is critical that both of them be benefit-eligible. Since this rider ceases paying benefits when the insured spouse recovers or dies, it might be difficult for the consumer to understand that the rider benefits have been terminated.

I can briefly describe some of the design variations that come from this kind of rider. The company may require some sort of prescreen for coverage and so forth to keep the premiums down. There is quite a bit of antiselection in this rider so it is critical

who is accepted for coverage. Another variation is that you might have a grace period extension so that when the insured spouse recovers or dies, the rider continues to pay benefits for a limited period such as 180 days or even up to a year. A third variation is that the rider daily benefit may be lower than the base policy for the insured spouse. A fourth variation is that the couple doesn't have to be a man and a woman; it can be any couple. The contingent spouse rider is a very interesting product innovation, although we always question how many people are going to buy it. It depends on your decline rate, which could be substantial. I think for my company, it will be about a quarter of the cases where one-half of the couple is declined for coverage.

What are some of the future product designs? Today what we have is essentially a level premium policy. The sales process involves quite a bit of education because there's still quite a knowledge gap on the part of consumers. It's a pull sale, or what we consider to be a pull sale. I'm going to talk about a transactional model in which the sale is more of a push sale. I'll describe some of these applications and then talk about some funding models—how the premium could be paid and things get funded. The transaction model is really based on how you simplify the product, and there are a couple of ways you can do that.

First, look at how you simplify one of the features, such as alternate plan of care. One way to do it is to put as much as you can in it such as the equipment benefit, respite care, and caregiver training. When you just put these in the alternate plan benefit, you can't describe each one of them in detail during the sales process. In order to simplify feature in alternate plan of care, you have to have heavy reliance on care management because that has actually minimized a lot of the claim disputes between the claimants, the doctors, and the insurance company.

If you want to get more advanced, then you eliminate facility definitions. I think I've seen one or two products that have done that. It is another way to simplify the whole sale and make the product a lot easier to understand. Essentially, if we think you need help, you get it in any form you like.

How about the sales process? One of the reasons we think the transactional model is going to become popular is because companies are branching out to other distribution channels like banks, financial planners, and security brokers, and they're very comfortable with transactional type of sales. Sometimes you'll have a partnership sale. That means maybe the agent with the relationship may not know much about LTC, but he or she will team up with an LTC specialist to quote the sale. This partnership, coupled with a simplified feature, will make this click really well. The other thing of course is some sort of simplified application underwriting process. It could involve telemarketing or phone agents to take the application over

the phone, or the Internet. The whole transactional model really is trying to move away from an agent sale and toward more of a self-directed sale with intermediaries who may not be LTC experts. Clearly, if you want to sell on the Internet for LTC, you need some sort of transactional model.

There are three classes of funding models I can think of. One is bundling. The most obvious application is an LTC rider on universal life or variable universal life coverage. One application I've seen provides an accelerated benefit when the claimant is benefit-eligible, reducing the cash values and the death benefit proportionately. Or you could purchase a rider that basically allows you to access coverage on top of the basic life coverage. One of the issues in designing this type of product is that for life insurance there's a maximum cost of insurance. The question is whether you have the maximum cost of insurance for LTC.

The second bundling approach is basically using an annuity— a single premium, deferred premium, or mutual funds—to fund premium for LTC. One of the big pricing consideration is persistency. You tend to have higher persistency once you have a combination product like this, and as a natural extension to that there are separate policies. I'm sure pretty soon somebody will come up with a combination of annuity and LTC and essentially have a universal LTC as a product.

Another funding model involves premium pattern. Some policies can be YRT for a while, maybe until 65, and then become level premium. That is because the going in-rate for people in their 40s or 50s is much cheaper with a YRT premium. They can afford scheduled premium increases since they’re usually in the working age group.

The next premium pattern is limited pay and again, which has become very popular. It can be single premium, 5-pay, 10-pay, or pay to 65. For a small corporation, you can really come out with a discriminatory plan for the key executive. You can purchase the plan and have the premiums deducted, and you can do it at any time. We actually have a tax advantage today for doing limited pay. Pricing issues on the limited payment plans are higher persistency; when it's paid up, it becomes noncancellable. What do you do about it? Apparently, some carriers are willing to go and sell this.

Some designs have to do with home equity. The obvious application is a reverse mortgage, in which all or part of the reverse mortgage payment you get from a lending institution goes to pay for LTC premium. The other application is when you couple an LTC policy with a fairly high deductible and an equity line of credit so that the equity line covers the high deductible. The advantage of this is that your

basic access of the LTC policy becomes fairly cheap. You can actually fund the premium through the equity loan, so this is a pretty nice and novel idea.

I'm going to speak quickly on regulations. The current situation is that regulators are very concerned about carriers intentionally or unintentionally lowering their price and basically using guaranteed renewable provisions to raise rates. Regulators view LTC policyholders as a fragile group on a fixed income that is unable to afford rate increases. Further, the elderly are politically very strong. There is a lot of pressure on the NAIC level and the state level to do something about it. A couple of years ago, New Mexico came up with rate cap regulations. That's a first step. Recently, California came out with a noncancellable proposal. That seems to be a second step. It seems like these developments are here to stay. There are quite a number of rate stabilization techniques that the regulators are thinking about, and I believe there's going to be an interim NAIC meeting in Kansas City in August 1999 to talk about some of these proposals.

How does it affect product development? I think there's a delicate balance between regulation, risk, and innovation. More risk is shifted to the carriers when regulations put a hammer on rate increases. Product prices probably will go up and I think innovation will be pushed down because companies will be more concerned about coming out with some aggressive features. Something else needs to give, and, hopefully, as regulators develop rate stabilization regulation, they will look at two things. One is the loss-ratio requirement. Is it still appropriate to have a 60% lifetime loss-ratio requirement? The other is to look at what the risk transfers are between the insurance company and the customers.

The game's not changing, and I predict that in the next ten years the regulatory environment is going to control quite a bit of how we develop new products.

Mr. Roger L. Martin: I am by no means an expert in the LTC area. I've been involved in LTC for two years now with UNUM. Prior to that, I spent 12 years in the individual disability business with Paul Revere. I'm going to talk briefly about UNUM's LTC history. Our current product is Advantage Plus, which is currently being introduced as we speak. It's been approved in probably 15 or 20 states, filed in all states at this point, and should be hitting the street in the next week or so. Quickly, I want to talk about two specific topics in underwriting. The first is the discounts that go along with our Advantage Plus product, and the second is the modified underwriting program that we have introduced at UNUM. Finally, I want to review the integration of LTC and disability. UNUM, being a major disability carrier, has tried several different, innovative ways to couple LTC with its disability products.

In 1988, UNUM entered the continuing care retirement community market. That was our first stint into this LTC type of business. In 1989 we entered the employer group market, and, in 1991, the individual marketplace. We introduced in 1995 our first integrated activities-of-daily-living (ADL) disability products. Most recently, we introduced our Advantage Plus product, which is not going to replace our Advantage One product, but will be out on the streets at the same time.

Advantage Plus is guaranteed renewable level premium. We use a disability model at UNUM; basically monthly benefits. There's no coordination with Medicare or any other kinds of offsets. We have a single pool of money; however, we do have one benefit called the alternative care services benefit that is a separate pool. We have both tax-qualified and nonqualified versions in most states. We have health, spouse, and billing discounts. I'll touch on them a little bit. Other features include waiver of premium, high/low commission structure, and the usual features found in LTC products such as grace period, free-look period, and standard exclusions. The high/low commission structure means a first-year rate much higher than the renewal level.

Why a disability model for UNUM? First of all, it leverages UNUM's extensive disability database. With UNUM's unique risk-management techniques, we're able to utilize our disability database to help predict and project future claim costs. From a consumer perspective, it allows the consumer flexibility in responding to personal needs. It allows the product to keep pace with the evolving care delivery system. We are providing a monthly benefit and are not impacted by changes in the delivery system from a cost perspective. This approach eliminates the hassles of vouchering from a claimant's perspective and also promotes rate stability. The product is immune to changes in the level of availability of offsets, and it allows us to manage the cost of care.

What are the built-in features to the Advantage Plus product? Available benefit amounts are $1,000–8,000, which roughly translates to $30–260 per day of benefit. The assisted living facility benefit is at 100%, and home care benefits of 60%, 80%, and 100% of the facility amount are available. I'll talk about the alternative care services benefit and LTC Connect, which is really a national service which provides informational support to both policyholders and claimants. Again, standard features such as respite care and bed reservation are included in the product. Optional features I'm going to touch on include inflation protection, restoration of benefits, available options for married couples, the nonforfeiture option, and our accelerated payment option. We did introduce, and we are one of the carriers that feel comfortable with, the accelerated payment option. We are concerned with noncancellable and persistency issues Bob mentioned earlier, and we'll talk a little bit about some of the challenges that we face with that.

Let's review some of the base plan features: $1,000–8,000 in monthly benefits; elimination periods of 20, 30, 60, 90, 180, or 365 days; lots of available options to the consumer. We do have a 365-day accumulation period for that elimination period, so it does not have to be continuous day after day. Having a 365-day period does introduce some pricing considerations. In our prior products, we had an accumulation period equal to three times the elimination period rather than a single-year-accumulation period. Again, to provide maximum cost flexibility to the consumer, benefit periods are two years through six years and lifetime. We have the more traditional professional home care rider and the more comprehensive total home care rider that includes both professional and informal care.

Moving to facility care, for LTC, the concern of the insured is being reimbursed for the cost of care. The most commonly identified level of care is of a skilled type provided in a nursing home. Interestingly enough, however, only about 20% of the LTC events is being provided in this type of facility. The national monthly average cost of a nursing home today is around $3,500–4,000, which clearly varies significantly by state and rural versus metropolitan locations. Another type of care being provided one step below nursing home care is assisted-living-facility care. Assisted living facilities are becoming popular options for people who are unable to maintain independent living, but who don't need the skilled care provided in a nursing home. UNUM's current assisted-living facility benefit pays 100% of the nursing home benefit.

The community care and professional home care services are provided in the home by home healthcare professionals and licensed professionals. Adult day care also is covered. One hour of professional care service equals one full day of coverage. During the elimination period, we'll count one full day of coverage per week to equal seven days, and during the benefit period one day of coverage counts as one-thirtieth of the monthly benefit towards the maximum lifetime benefit.

Informal care is covered in the total home care rider. This level of coverage can be provided by anyone, including informal and licensed caregivers in the home or in the community. Once the insured suffers a two of six ADL loss or has a cognitive impairment, a monthly benefit will be paid. There is no tie to who is providing the care or where it is being provided for benefit qualification. This is a fairly expensive benefit as can be expected, and from an underwriting perspective, the risk selection should be very thorough when looking at total home care coverage.

Why informal care? Why the total home care rider from UNUM's perspective? We believe that informal care is clearly differentiated for UNUM, but, at the same time, it also fills a large consumer need. As I mentioned earlier, only 20% of LTC events are in the nursing home; the other 80% are covered in the person's home or

community-based facilities. Of that 80%, 72% of the total is covered by family and friends and 8% by healthcare professionals. Clearly there is a large need to cover the hidden cost of family and friends and others who are providing that caregiver support.

Moving on to the alternative care services, there is a separate pool limit with a $5,000 lifetime maximum benefit. This benefit allows for the purchase of special services or equipment that are deemed medically necessary. It will cover the cost to train a spouse or another family member to provide caregiver training and support, and it is designed to assist the insured at their home or in residential housing to prevent the event of having to enter a nursing home. LTC connect is a service that provides informational support through an experienced provider or third-party vendor. We provide an 800 number with informational support to both our insureds and our claimants. The 800 number is staffed by counselors with at least a master's degree and an average of seven years of counseling experience. They provide complete and impartial information without recommending a particular provider or service. They will also do assessments and help with developing plans of care.

Let's move on to some of the options that are available. For inflation, which is pretty standard in the industry now, 5% simple and compound options and capped and uncapped are available. It applies to both preclaim and postclaim and increases in monthly benefit and/or remaining lifetime maximum. Restoration of benefits, a new feature for the UNUM product, will restore the lifetime maximum to its full original amount if the insured is no longer disabled under the contract definition and has not received benefits for 180 consecutive days and the lifetime maximum benefit has not been fully exhausted. Pricing considerations here include not only assumptions, but the actual modeling techniques in your pricing models. You can do it on a very simplified basis or it can be very complex.

Let’s continue with options available to married couples. First, we have a 10% premium discount for spouses, which is available if both are insurable and apply. Survivorship waiver provides for a paid-up policy if both policies are in force for ten years and one spouse dies. The rider terminates on divorce or death of the spouse before ten years. That last point doesn't seem really applicable from a pricing or an actuarial perspective, but clearly from a marketing perspective, there are lots of issues with how to deal with divorce or death during the first ten-year period. Again, from a pricing perspective, you really need to think about persistency and maybe selection or other issues with respect to morbidity.

The standard nonforfeiture provision is the shortened benefit period, in which coverage will continue if the premium stops. Premiums must have been paid for

three years, the monthly benefit remains the same, and the lifetime maximum benefit equals the total premiums paid in less any claims paid. We do provide a ten-year paid-up option, which is that premiums are paid for ten years; then the policy is paid up. The other option is premiums paid to age 65. It is important to consider if lapse rates will be different if this payment option is in place. Regarding morbidity assumptions, you need to price for the noncancellable feature of the policy basically after the paid-up period and nonforfeiture option. A lot of states required us to provide a built-in nonforfeiture benefit on this given the high-premium nature of the rider.

The other interesting facet of this policy is really from a marketing perspective. If you get the astute broker out there who has a little bit of a math background, what he or she will try to do is compare the level paid premium on a discounted basis assuming that somebody dies at a late age such as 90. The broker will compare the discounted premiums paid on a ten-pay basis to a level-pay basis and find that the two don't match. How come? Well, what that astute broker is missing is the change in persistency or morbidity assumptions. We spent a lot of time educating the consumer and the brokers as to exactly how this option works and how it is priced. We see this clearly in the employer marketplace for small corporations that want to provide LTC coverage and pay for it during the working years of their employees.

Let's talk a little bit about health discounts that we have available. We have a Preferred Plus discount, which is a 20% discount based on full medical underwriting. The insured must be in exceptional health as determined by the underwriter and must have had a physical in the last two years, no medical history with likelihood of progression, no tobacco use for one year, and height and weight within guidelines. We have a preferred 10% discount based upon five questions on the application. The insured must confirm no use of tobacco in the last 12 months; regular exercise; volunteer work or attendance of social functions; no use of mechanical devices, wheelchair, walker, quad cane crutches, etc.; and, again, height and weight within a preferred range. This 10% preferred discount cannot be combined with the Preferred Plus, so, in other words, the maximum preferred discount you can get is 20%. Then we have our select classes, including a standard class, a substandard class 1 with a 25% load, and a substandard class 2 with a 50% load.

I want to briefly talk about our guaranteed standard issue program. This really is a short form application with basically two or three questions: actively at work, no use of mechanical devices, and within age ranges. On an employer paid basis, it has to be 100% of a defined class and have a minimum of 15 lives. On a voluntary basis, it has to be the greater of 15 lives or 10% of the employee group; participants

have to be actively at work at least 30 hours per week, and they have to be W-2 employees. Coverage includes facilities and home care coverage up to 50% of the facility level, 90-day elimination period, inflation option, and benefit periods up to 6 years. Eligible discounts provided are a 10% discount if there is 100% employer paid and a 5% flexibility discount.

Finally, let me talk about the integration of LTC and disability. In 1995, we introduced an individual disability product called the Life Long Disability Protection. This is really a disability product that provides three levels of care. You have your basic income replacement option that you can think of as a normal, traditional disability policy. It also provides a Disability Plus rider that pays out if the insured is ADL-dependent, which will basically increase the monthly income replacement amount. The third feature is a transformation benefit that allows the individual disability policy to be transformed into a LTC policy with little or no underwriting at the attainment of age or specific ages after age 60, 62, 65, and 67. You can elect this transformation while you are on claim if you are one of those ages. That's on claim from the disability definition of disability, and it does not mean you will be disabled under the LTC definition of disability.

Catastrophic disability is really a group-term product. It's a blue-collar kind of coverage and it will provide benefits. The disability definition is really based on an ADL-dependent kind of definition of disability. The transition disability and Disability Plus riders go along with our group LTD product, and it basically provides similar options of increased benefit amount if ADL-disabled and transformation to a LTC coverage after the attainment of certain ages similar to the Life Long Disability Protection coverage.

Mr. Herman: I appreciate Roger's clarification of the term high/low commissions and its meaning in regard to the first-year commission rate being higher than renewals. Actually, I use that term for something else. In the brokerage marketplace, companies typically will offer a commission scale that varies first-year commissions by issue age; they are higher at the younger ages and lower at the older ages. I suppose this term has a couple meanings. As I mentioned earlier, I'm not going to give away too many pricing secrets.

I am going to discuss professional and regulatory considerations in LTC product pricing, touch on the selection of pricing assumptions and the impact of product features, and share with you some of the common pricing pitfalls. I'm sure most of you have read the *Actuarial Standard of Practice (ASOP) No. 18*, which has been around for many years, but was just recently revised and is effective for all work performed on or after June 1, 1999. The revisions are actually pretty significant, so I

will review them in some detail before moving on to discuss some LTC product filing issues.

ASOP No. 18 addresses coverage and plan features, assumption setting, premium rate and reserve determination, sensitivity testing, cash-flow testing, experience monitoring and communications and disclosure. There are several new features in the revised standard that I think are of particular importance, the most notable being that the actuary is to establish claim incidence rates, claim termination rates, and costs of eligible benefits separately for at least nursing homes, assisted-living facilities, and home care benefits. Those actuaries who have been adding a claim cost load to their facility assumptions to cover the costs of home care are not following the Standard of Practice (SOP). Even more significant is the guidance with respect to assisted living facilities. I'm sure many actuaries who have been pricing LTC policies with separate claim-cost assumptions for home care versus facility benefits have included the expected assisted-living facility costs with nursing home costs.

Another important point in the SOP is to identify experience assumptions that are likely to change materially over the plan term, and consider reflecting changes when setting assumptions. One point, which cannot be overemphasized, is that the actuary should not rely on anticipated future premium increases to justify unrealistic assumptions. The final point that I would like to mention is that the actuary has a responsibility to inform the sponsoring entity of the need to collect experience data in a manner that permits the actuary to compare assumptions with emerging experience.

Pricing actuaries who are involved in product filings, of course, are familiar with the actuarial certification that must be in the actuarial memorandum to obtain product approval, and most states accept fairly standard language that benefits are reasonable in relation to premiums and so forth. A couple states, such as Colorado, require special language. In Colorado, you have to certify that premiums for the line of business are not excessive, inadequate, or unfairly discriminatory.

There are some other issues about annual rate filings. Those who perform actuarial work on Florida business are aware that there's an annual rate filing requirement in Florida, and the state has been enforcing this requirement. If you are filing new LTC products at this time and the company is out of compliance with the annual rate filing requirement, you might encounter some difficulty getting the products approved. The required rating certification is meaningful because the actuary must consider actual past experience relative to pricing expectations before certifying that premiums are still reasonable in relation to benefits. Essentially, through regulation the state is requiring active management of premium levels for in-force LTC

business. And since new product filings must compare benefits and premiums to in-force products, the state's requirement of active rate management in practice extends to newly developed products as well.

I am aware of another state that has an annual rate filing requirement. This state is Colorado, and while the state has taken a different approach from Florida, the intent to encourage proper initial product pricing is similar. For Colorado business, an actuary has to certify that the premiums for the LTC line of business have remained level for existing policyholders and are expected to remain level over the life of the policy. Of course, this certification would only be applicable for business that does not appear to the actuary to be in need of a rate increase.

In terms of consistency in assumption sets, I have seen actual practice where the actuary has several distinct sets of assumptions. In one case, the actuary had a filing assumption set, a pricing assumption set, and a valuation assumption set, and none of them really had any relation to each other. I would not advise such a practice. But with that said, there are some differences between the assumptions used in your loss-ratio demonstration and your pricing assumptions. Consequently, in practice the pricing lifetime anticipated loss ratio generally is not the same as the filing lifetime anticipated loss ratio.

I would emphasize in regard to the loss-ratio demonstration that your assumptions underlying the demonstration should be consistent with your pricing assumptions. Any material differences should be disclosed. An example that comes to mind is the state of New Mexico, in which products may be approved using a loss-ratio demonstration based specifically on the policy termination rates as specified in regulatory tools rather than the pricing assumptions.

I think the key difference between the filing and the pricing lifetime loss ratio is the specific interest rate used in the calculation. In most product filings, the actuary will present the lifetime anticipated loss ratio as well as expected annual loss ratios and, of course, the lifetime anticipated loss ratio is calculated using some interest rate. Whether this interest rate should be an after-tax rate or a pre-tax rate does not seem clear, as I don't think there's really an industry standard or specific professional guidance. I believe that many actuaries choose to use the statutory valuation interest rate in the filing lifetime loss-ratio calculation, which is close to an after-tax pricing interest rate, but it may actually be a little higher. Personally, I use the valuation rate and I think that works everywhere except for the states of New Jersey and New York, which mandate some special interest rate.

In terms of the definition of the loss-ratio, states will generally accept the present value of paid claims plus change in claim reserves and liabilities without an interest

adjustment divided by the present value of premiums. Paid claims plus change in claim reserves is sometimes just called policy benefits, and I think most states will accept this definition with the calculation of the lifetime loss ratio made using the valuation interest rates. For individual LTC insurance, most states have a 60% minimum loss-ratio standard, except for a handful of 65% states. I believe there are four: New Jersey, New Mexico, New York, and Wisconsin. If you were to calculate the loss ratio on a paid basis rather than an incurred basis and use your pricing pre-tax earned rate, you'd likely have a loss ratio in the 50–55% range. Since on the surface this result may appear to be out of regulatory compliance, it is especially important to disclose assumptions and methodologies in new product submissions.

I have two further examples regarding state-specific loss-ratio demonstrations. First, in Florida the actuary must demonstrate compliance of each combination of base policy plus optional rider, so there can't really be any subsidies across benefit options. Second, Maine continues to require, to the best of my knowledge, a paid definition of the loss ratio. Compliance with this definition may require a company to lower premiums in order to obtain product approval, and commissions might need to be reduced in Maine (as they often are in the 65% loss-ratio states) to maintain product profitability.

I will speak briefly on commission regulations. Several states have regulatory requirements of some form of levelized commissions for LTC insurance. Delaware, like Indiana, has adopted the "200% rule," which states that total compensation can be no more than 200% of the renewal-year compensation that must be paid for a reasonable number of years. Wisconsin has a "400% rule." Michigan requires level commissions for the first 3 policy years for ages 65 and up, and finally Pennsylvania has a commission cap. Pennsylvania's cap, 50% in the first year and 10% in renewal years, applies specifically to the direct-writing agent, so you can pay additional compensation to higher levels of the field hierarchy.

I would like to discuss some of the current product issues that we are seeing, the first one involving care coordination. It is becoming more and more important to offer some sort of a care coordination model where there are incentives to use a care coordinator. You may go to a weekly pool rather than a daily benefit, benefits may be enhanced, and the policy might even pay benefits for family members. The idea is that the care coordinator, which is associated with the insurance company, will ensure that the care is appropriate and will help to control the level of claims. Many states have resisted care coordination as they find it to be like managed care, which may or may not be a bad thing. Texas consistently resists approval of policy incentives in which a higher level of benefits is paid when benefits are accessed through the company-approved care coordinator. Missouri just very recently has

been going the route of Texas, in that enhanced benefits may not be provided if they are contingent upon access through the company-approved care coordinator.

Other states that review care coordination provisions closely include Pennsylvania and California. Previously, Pennsylvania would not approve policies containing special incentives or enhanced benefits, but the state has modified its position. Now the state generally will approve such incentives, but with some restrictions. For instance, if a policy requires a coinsurance percentage to be paid by the insured if the care coordinator is not used to access policy benefits, the coinsurance percentage cannot be in excess of 20%. Additionally, if weekly benefits are to be paid rather than daily benefits, Pennsylvania requires that they be paid regardless of use of the care coordinator.

Another issue that has become state-specific is the spousal discount. Most of today's policies offer a 10%, 15%, or even 20% spousal discount for both policies when a husband and wife are issued. If you are filing product in Michigan, you have to provide some sort of an actuarial statement certifying that the spousal discount is experience-based. Recently, Florida began rejecting spousal discounts that are based on the purchase of a separate contract and, interestingly enough, the state cites the entire contract provision of the policy. While this makes some sense, when both spouses purchase a policy the carrier has evidence that a healthy caregiver is present. And, national statistics along with the vast majority of LTC industry experience indicates that the presence of a primary caregiver significantly impacts benefit utilization. My recent experience has been that in order to get a spousal discount approved for use with a new product in Florida, you very well may have to base eligibility on marital status alone with no other requirements. Further, the state generally resists approval of discounts that may be removed in the event of divorce or death. New Jersey and South Dakota are other states in which you may encounter some difficulty obtaining approval for spousal discounts.

I understand the industry is leaning more and more towards selling tax-qualified LTC coverage relative to nonqualified coverage, but a lot of carriers particularly in the brokerage marketplace need to have a nonqualified product available because the agents just like to sell it. California is the one state that requires a nonqualified product offering, based on state-regulated benefit triggers. If you are filing a nonqualified product in Tennessee, three benefit triggers are required. One of these is medical necessity, which is particularly of concern for home care benefits. Many carriers that market nonqualified home healthcare coverage will not offer such coverage in Tennessee.

Six ADLs are defined in NAIC model regulation. This may impact your product pricing when designing nonqualified LTC policies. For instance, the field force may

desire to sell a tax-qualified policy with the familiar two of six ADL benefit trigger and a nonqualified policy at the same rate structure that triggers benefits based on inability to perform only one ADL. From an actuarial perspective, this construct may be feasible, for instance, when the ADL list in the nonqualified policy is pared down to five ADLs by excluding bathing (which is generally the first ADL lost because of poor health or frailty). But, with states that have adopted regulation that requires definition of six ADLs, including bathing, in the nonqualified policy, the construct breaks down. Either the premiums would need to be increased, or the nonqualified ADL benefit trigger would need to be changed to two of six as in the tax-qualified policy.

In regard to pricing assumptions for LTC, there are loss-ratio drivers, expenses, reserves and target surplus, mix-of-business assumptions, and change-over-time assumptions. Policy termination rates I think are an absolutely critical assumption for LTC. I have seen several cases where a rate increase is needed because the original termination assumptions were on the high side. Now that the industry is a little more mature, we're getting a feel for what the ultimate lapse rate looks like. Some carriers are experiencing an ultimate voluntary lapse rate as low as 2%. If the actuary priced with 10% ultimate lapse, not 2%, there's really going to be a deficiency in the premiums. I would also point out that it may be appropriate to vary your lapse rates by issue age, payment method, benefit type, or other factors. Finally, I will comment that the first-year lapse rate and the not-taken out rate may be influenced by your distribution system. If you have a high-pressure-type system, you'll likely see a higher first-year lapse rate, but that probably wears off and by the time the second or third year goes by, I think purchasers generally keep their policies.

When setting mortality assumptions, I suspect most actuaries would agree that life insurance tables are inappropriate because these tables are conservative in the wrong direction for LTC insurance pricing. Good sources for your mortality assumption may be U.S. population data along with selection factors or an annuity table such as the 1983 group annuity mortality (GAM) or the 1994 GAM.

In regard to setting morbidity assumptions, I think everyone would agree that your own company's experience is the most relevant source, and you should consider the sales region, the type of distribution system, and level of underwriting expertise. Region has been a real issue for LTC insurance product pricing. Some of the states in the Midwest, including North Dakota, have had utilization problems with facility coverage. Other regions, such as south Florida, have experienced claim problems with home health care. Home healthcare utilization in general will be higher in large metropolitan areas, such as Chicago, Houston, and Los Angeles, relative to

rural areas. Regional pricing may be the best strategy, particularly for a stand-alone home healthcare policy.

The net investment income assumption is going to have a huge impact on these products because there's a very long tail on them. I've seen some companies recently setting the assumption for the pre-tax interest rate as low as 6% level. Larger carriers often are more aggressive in assumption setting, as they can segment their assets to benefit from the longer duration of the LTC liabilities. They may be able to use a rate of 7%, or even 7.5%, perhaps grading down over time. I would suggest that it is critical to avoid a disconnect between your assumptions and your actual investment practices.

In regard to expenses, agent compensation is the biggest piece. Broker total compensation rates as a percentage of premium are usually in the neighborhood of 75% first year and about 15% renewal years. The first-year rate may be even higher, particularly at the younger ages if a "high/low" type scale is in use. To help maintain product profitability, it may be helpful to design riders to pay no commissions or just first-year commissions only. That way, you can advertise a very healthy compensation rate but not pay it on all the coverage, and you can attract quality producers and still have adequate profit margins in your product. Like riders, guaranteed purchase option increases are an element of coverage in which full commissions may not be paid. It also helps your profitability to not pay commissions on waived premiums or rate increase premium if there is any.

I will make one point about policy reserves for nontax-qualified plans. My point is that nonqualified plans still are subject to two-year full preliminary term tax reserves, so we have a tax reserve mismatch on the nonqualified coverage. That in itself ought to make a nonqualified product cost about 5% more than a tax-qualified product if you're looking for the same profit margin. Many companies, however, will charge the same rate, as they may have an exchange program and find that it facilitates administration to use the same premiums.

In thinking about how product features impact LTC insurance claims, several features come to mind. Whether your coverage is stand-alone or comprehensive is very, very important. Other important features include inflation protection, care coordination, waiver of premium, lifetime waiver premium for surviving spouse, limited pay, and noncancellable coverage. Stand-alone coverage, I believe, has had different experience relative to policies that cover the whole continuum of LTC, most notably stand-alone home healthcare coverage. Many carriers market stand-alone home care coverage with premium rates that are two times or two-and-a-half times the rates of a home healthcare rider, and it's actually the right number. That may surprise some people. In particular for stand-alone home care coverage, care

coordination has proven effective in controlling claims, so the pricing should take into consideration any such provisions. Companies that provide care coordination services have been instrumental in helping insurance carriers control home care claim costs, especially in some of the high claim areas like south Florida.

Briefly on inflation protection, automatic inflation increases of 5% compounded annually are generally required by states, so these benefits are offered everywhere. The high price tag has really limited sales. Some companies sell about 90% of their business with no inflation protection, which becomes a consumer issue, but I think guaranteed purchase option provisions help address the issue. Through these provisions, policyholders who don't purchase inflation protection at issue will have the ability to increase coverage later without providing evidence of insurability. I would emphasize that it is critical to price compound inflation benefits properly. There may be a tendency for the actuary to inflate the claim costs by 5% compounded annually to cover the inflation protection benefits. That doesn't quite work because using this approach, you are ignoring the continuation of inflation protection after claim status begins.

Regarding waiver of premium provisions, waiver of premium for confinement is a standard feature in today's contracts. I think competition in the industry has led carriers to waive premium on home health care, and the contract may specify that a regular basis is required such as eight days per calendar month or four or five days per week. Waiver of premium provisions are very, very costly at the older issue ages, and it generally would not be suitable from a pricing perspective to load premiums across the board by a flat percentage. Dual waiver is popular among some of the carriers, particularly in the brokerage marketplace. In dual waiver provisions, the premium for a spousal policy may be waived whenever the policyholder's premium is waived, or you may waive the spouse's premium just on the policyholder's confinement rather than on home health care to keep the cost down.

Lifetime waiver of premium for survivor was discussed in some detail earlier. There are a lot of benefit variations on the market right now for lifetime waiver, and in some states it may be difficult to get approval. I think Florida has a problem if you put it in the base policy. I find that this feature is very risky. It's essentially noncancellable once it's paid up. I don't know how you reflect that in your pricing, but you certainly should consider it. I think some carriers basically have included some form of lifetime waiver without charging for it. It's a great marketing tool, but really you should be sure that the cost of the benefit is reflected in your product pricing.

Limited payment options were discussed earlier as well. Several companies offer ten-pay, five-pay, or even single pay, which is very, very risky. I personally don't advise at this point to go with the single pay option unless you can charge quite a bit for it. Further, there are hosts of issues with developing a single pay product, such as the morbidity basis, how you reflect the noncancellable aspect, how you do reserves and target surplus work, and what the target surplus formula is. Not all states will approve single pay, or they may require special nonforfeiture values. When I priced one of these, I found that issue age 40, with compound inflation benefits, turned out to be more expensive than issue age 65. That surprised me at first; it's just sort of an interesting result that you have to think about for a bit.

We have had a good deal of discussion on noncancellable LTC insurance, so I'll just pose the question, is there an appropriate load to charge to guarantee premiums? I don't know the answer myself.

Lastly, I will share some of the common pricing pitfalls, or at least the ones that I'm aware of. Common pitfalls include ignoring the inflation increases during claim status, using a flat load to price waiver of premium provisions, and ignoring or underpricing the lifetime waiver of premium for survivor benefits. In regard to assumption setting I would caution against ignoring the impact of special features (such as lifetime waiver for survivor) on lapse rates and not considering the potential impact of the sales region or distribution system.

If compound inflation benefits on a lifetime benefit plan were priced simply by increasing the noninflation claim costs by 5% compounded annually per policy duration (thereby ignoring inflation increases that continue during claim status), the attained age claim costs would be understated by about 30% at age 50. That figure decreases to about 10% over attained age 85. Particularly for the younger issue ages, with pricing plans that have a long benefit duration it is critical to set up your pricing model properly.

Many actuaries price, or have priced, waiver of premium provisions using a flat percentage load on premiums developed before consideration of the waiver provision. For instance, the pricing actuary might decide to load gross premiums for a product without a waiver benefit by 4%, figuring that's about what it costs for the central expected issue age of 65. Using a proper modeling approach, which may be nothing more than using the tidy formula we use at Wakely and Associates, it turns out that the waiver provision should cost 20–30% or even more at the older issue ages. If you are issuing coverage all the way up to age 99, which has been the case with some carriers, waiver starts becoming so expensive that you almost can't price the product because it just costs too much.

Mr. James M. Glickman: I actually had a lot of other ones besides the ones you named, but one of interest that has had some popularity recently is the concept of paying on a policy that's in confinement after four months making the policy paid-up, the presumption being that you'll have very little recovery. I'd be curious to hear your impressions on that, particularly on the issue of what percentage of people between the 10- and 16-week period on claim may linger for the large benefit of having their policy paid up.

Mr. Yee: On the top of my head, I think more than 50% of people don't recover after, for instance, 120 days. But still, a substantial number of claimants would still be around and might linger as you suggest.

Mr. Carroll R. Hutchinson: Since LTC is so complex and subject to so many regulations, how many LTC policies do you feel you need to sell over a period of time in order to produce a profitable product?

Mr. Herman: Could you clarify how many products you need to sell over time or different variations of the product?

Mr. Hutchinson: Well, either way.

Mr. Herman: Generally, I think to really sell a nationwide product today you probably have to have about 30 products in 50 states, but a lot of these are simple differences such as claim payment provisions or things that really don't affect the product pricing. You may have about three or four really different products; for instance, California stands out as a state that requires special product development efforts. I think carriers today have their products on the market for about a year or two. There's real pressure to develop a new product, so the shelf life for a product today is probably about two years.

Mr. Martin: I would agree with that and I think it's getting even shorter in terms of innovation and product design. We're going to start seeing rolling over of products and new features coming in that will clearly pose pricing considerations and pricing risk as we move forward. How do we collect experience when we have so many different variations of products out there?

Mr. Hutchinson: But how many policies do you feel you actually have to sell and the company that's selling the product in order for you to be profitable?

Mr. Herman: What's your critical mass?

Mr. Hutchinson: That's right, critical mass.

Mr. Yee: Again, on the top of my head, you have to sell something like $10 million of premium annually because you need compliance, claims, underwriting, and investment expertise that you have to maintain. The up-front investment cost is very high, and what I have seen recently is that some larger carriers are coming back to the business. Northwestern Mutual started from scratch, which is an example of a larger carrier getting into it. For smaller carriers, there are other ways, such as reinsurance or private label. That way you can probably get in a lot easier than investing in a whole stack of people to do it. I would strongly not recommend it unless you really want to do this for the long term.

Mr. Michael A. Shumate: This is mainly to Bob. I know that or at least I've heard, if I'm wrong correct me, that you're probably leading a GE Capital and in particular leading as a proponent of a noncancellable feature of LTC. I'm very disturbed by the noncancellable features and also these limited benefits because, quite frankly, I think our payments to companies who went under are probably large enough; we don't need it to be any larger. Why do you believe that LTC can be noncancellable or limited pay? And what makes you believe that change in the social habits of the elderly or practices in medicine won't make it more expensive in the future?

Mr. Yee: I'm sorry, I'm not a proponent of noncancellable. I at least personally and as part of GE fought very hard especially in California to say that we could not really live with noncancellable. A couple of companies already came in to California saying that if they put in noncancellable regulation they'd pull out, and I would recommend our company do the same thing. No, I'm not for noncancellable at all although that being said, I also think that right now there are not a lot of risk transfers happening to the insurance companies. I think it causes an imbalance in the regulatory environment right now, and we as an industry have to look at how much risk we're willing to take. We need to take those risks so that it's a more level playing field for both the consumer and the industry. Right now I think there are carriers knowingly lowballing price, and regulation is really not stopping them.

Mr. Shumate: This comment involves the pitfalls of inflation and limited pay. I see out there rates for limited pay that are similar conversion factors from the full pay for both without inflation and with inflation and the distribution is a lot different; the rate conversion should be different as well.

Mr. Herman: I would agree with that.

Mr. Morris Snow: I've been watching this business I guess for about 12 years now, and one of the things that I keep on noticing is that everything seems to be working in the wrong direction. Risks are going up, regulation's going up, policies are becoming more complicated, carriers need rate increases and are going out of

business because they can't get them, and everything is going in the wrong direction. The prices stay the same or get lower. I'm trying to figure it out and I guess a lot of other people are trying to figure it out. I'm wondering if our panelists here could give me some insight into what's happening. Saying that everybody's lowballing or a lot of people are lowballing doesn't seem to answer it. Is everybody lowballing or is anyone worried about what's going to happen in the future?

Mr. Herman: Let me speak to that just briefly. I think that in the industry there are carriers that have had very favorable experience. They tend to be carriers with a captive distribution system that market a lot of product mostly through dedicated agents. Those are the carriers that have had success with competitive premiums. I don't know how many pricing actuaries out there really consider the distribution system. I think brokerage where there's a lot of antiselection potential may have a claims rate up to 50% higher or some huge number like that. I agree there's cause for concern but, again, this can be done and I think Bob would probably agree. Can you comment, Bob, about your experience with the industry's first or second largest block of business?

Mr. Yee: We definitely have product lines that are dogs, and we have product series that are fairly favorable. I think our position has always been that we're trying to look at profitability on an aggregate basis and trying to manage it. One of the ways to do that is to have a really good experience system and have a commitment to go and change rates at least on new business, as soon as you know something is not working. We're also sort of lucky sometimes, so I think it generally is working. But one of the problems I see in terms of prices staying the same and everything going in the wrong direction is I'm not sure LTC can be regulated by loss ratios. They put a real damper on companies that are doing very well. There's no upside whereas if something goes wrong, you get hit and a lot of these rate stabilization regulations don't consider the upside—they just want to limit the downside to the consumer. I think we really need to look at more than the controls on the back end. What are the incentives on the front end?

Mr. Yang Ho: I have two questions for Roger about the total care rider. One issue is if my next door neighbor is taking care of me, and something is done wrong, I can sue the company first. The other issue has to do with your care management partner. How often do you go out and make sure that people are really on time?

Mr. Martin: I'm not sure if I have an answer to the first question.

Mr. Ho: Do you ask the insured for a signed statement that waives the loss or something like that?

Mr. Martin: I don't know if we do, but I do know that we have very strict guidelines in terms of the broker or the UNUM field representative in explaining the coverage and what it is like. On the care coordination or care management in terms of benefit practices, our claims area has a very rigid policy in terms of trying to validate benefits, and we're constantly managing that claim when the claimant is receiving benefits. We will go out and request attending physician statements on a periodic basis if necessary, as a phone call just won't do, and there are other things that need to happen. We are very willing to go back out and redo assessments or use other tools. We believe that putting the cost and managing the claim on the back end really helps control our risk as well as underwriting on the front end.

Mr. Ho: So, in other words, not everybody should design this type of rider.

Mr. Martin: Correct.