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LONG-TERM CARE (LTC) VALUATION ISSUES

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The chairperson and members of the SOA LTC Insurance Valuation Methods Task Force will discuss the major conclusions and decisions found in their recently released draft document. There will be an opportunity for comments from the audience about the findings.

MR. BARTLEY L. MUNSON: We're going to talk about the exposure draft of the Society's Task Force for LTC Insurance Valuation Methods. I'm chairperson of the task force. Loida Abraham is the chief financial officer for the individual LTC line at John Hancock and has group LTC experience prior to joining John Hancock. Dennis O'Brien, from Transport, has a long experience in LTC in both pricing and reserving. Frank Knorr is with Duncanson and Holt (D&H) involved in reinsurance and is working with various carriers through D&H. What's interesting and very germane to our efforts is he has experience in the Society of Actuaries' (SOA) efforts on the disability diskettes and the work that was done several years ago for valuation tables. Peggy Hauser is a consulting actuary at Milliman and Robertson and works with health insurance and particularly LTC in a variety of forms with a variety of clients. Erik Huth from our Coopers & Lybrand office gets the enviable job of being recorder.

Our task force has LTC consultants and insurance company people; we have a decent mixture. Everybody on the 14-person task force has brought some very valuable, unique experiences and backgrounds. We have tried to share our various forms of expertise, and there is no one chapter that any one person owns. It's all a task force effort. I would say our profession has been blessed with a task force that has worked hard for three years. We've had 15 or 16 meetings and there was 100% attendance more than once. I don't think we predicted this much effort. But we're far from done, although we're at a key point working on an exposure draft, on which we'd like your help.

It's fair to say that we all don't agree on everything. In fact the panel will identify a few things where we can't agree and that's why we need exposure and your input especially. They're going to try to give the highlights and represent certain chapters, but we may slip into personal views once in a while. What they may say is not necessarily the considered view of everybody on the task force. Our formation was triggered by a December 1990 letter from the National Association of Insurance Commissioners (NAIC) by John Montgomery. We were formed in the summer of 1991. This does address the actuaries' environment in the U.S.

MS. PEGGY L. HAUSER: I think before we start giving the highlights of the entire exposure draft it would make sense to talk about what exists today that is related to the valuation of LTC. That's what Chapter 2 is all about—existing NAIC models. There are two models that Chapter 2 discusses. The first is the NAIC Model LTC

Insurance Act and Regulations and the second is the NAIC Model Minimum Reserve Standards for Individual and Group Health Insurance.

The first model that I mentioned, the LTC regulation, deals with a whole spectrum of issues related to LTC, but touches on the valuation of LTC only briefly. It actually does provide much direction as far as valuing LTC benefits that are accelerated life insurance benefits. That really hasn't been a major focus of this task force. We've been more interested and concerned with valuing the other benefits, the stand-alone LTC benefits. The model regulation contains only a sentence for valuation of those types of benefits and merely directs the valuation actuary to the more general minimum health insurance reserve standards which is the second model regulation that is mentioned in Chapter 2. That model regulation, the Minimum Reserve Standards for Health Insurance, provides general standards for all reserves for various health insurance products. It briefly talks about LTC. I'd like to talk about two items in that regulation that relate to morbidity when generating active life reserves. Since there is no standard for LTC, by default the valuation actuary should currently be, I'll quote, "using tables established for reserve purposes by a qualified actuary and acceptable to the commissioner," which is a void that our task force has been trying to fill.

The second item is the method and this was the only place that this regulation actually refers to LTC. This regulation was amended in June 1991 to specify that LTC should use a one-year preliminary term (PT) method. Since June 1991 according to my estimates and from looking at the laws that have been passed in the various states—and I could be off in this—it looks like ten states have adopted the model regulation since the LTC modification was made. Of those ten, seven states have gone with the one-year PT. The three remaining states have removed the reference to LTC and, by default, the two-year PT that's appropriate for all other health insurance reserves would be appropriate in those states.

I don't think that these existing models appropriately or completely address the needs of the LTC valuation actuary and again that's what our task force has set out to do.

MS. LOIDA RODIS ABRAHAM: After we looked at the existing NAIC models, we then had to focus on the kinds of products that we were going to address. When looking at today's marketplace for LTC, we recognized that there were various products out there. We had to focus on the kinds of products that were really representative of a majority of the offerings in the marketplace, and we prioritized that in Chapter 3.

The first huge broad category would be the stand-alone LTC products as opposed to the LTC benefits associated with other products. Under the stand-alone LTC products, you could further subdivide that into the individual or quasi-individual products versus the true group products. Those two variations really represent the categories in terms of reserving methods. Although the method of distribution, marketing, and filing are different for the individual or quasi-individual products, by and large, for reserving purposes, there really is no need to be different. This is different from what we could consider the true group product, which is mostly paid for by the employer where in some cases there is a reserve transfer upon termination of the agreement between the insurer and the employer and where there may be no more coverage

upon termination of the employee from the employer. There doesn't seem to be much of that type of product so we have not addressed that for purposes of this task force report.

In addition, we looked at the other types of LTC products or those associated with other products. For instance, you have a variety of LTC riders attached to life insurance benefits and you really could look at that in two ways; you could have a rider that reduces the life insurance benefit, and the other that doesn't reduce the life insurance benefit. In the case where they do not reduce the life insurance benefit, one could almost think of that as a stand-alone LTC product for purposes of reserving. The latter was, again, something we didn't focus on.

MR. MUNSON: We certainly had the opportunity and were encouraged early on to look at everything, but we've had enough problems trying to narrow it down to what Loida described. That is what we've tried to do. Loida's also going to take Chapter 4, the product features. Many of you in the room practice in LTC one way or another and you know some of these features. We, on the task force, all thought we knew these features too, until we sat down and reminded each other of all the variations and problems.

MS. ABRAHAM: Absolutely, Bart. Before we even attempted to start considering the valuation issues, we needed to understand the nature of the products we were dealing with and the complexity that they've included. The task force recognized that LTC is still in its evolutionary stages; part of our challenge was to deal with products whose features were changing. We were aware that not only were there significant differences between some of the older generations of LTC policies, but there were also huge variations among the products offered by various insurers in today's marketplace. In addition, the products of the future could be significantly different from today's product.

Despite the difficulty of having to deal with many variations, the job had to be done. We began by focusing our attention on plan design features and options that we knew existed in many of today's LTC insurance policies. The first is the nursing home or the institutional care benefit which is really the cornerstone of most LTC policies. They typically offer a benefit that's payable per day of confinement in a nursing home. Patients may need to meet some type of benefit trigger in addition to being confined to a nursing home and these triggers could vary depending on whether they're linked to activities of daily living (ADLs), medical necessity, certification from a physician, or cognitive impairment.

One thing that was characteristic of the older policies under the institutional care benefit was the requirement of a three-day prior hospital stay as well as the requirement of perhaps a more intensive level of care before being eligible for the less intensive level of care. Recent developments within the institutional product include expansion to assisted living care facilities.

There has been more innovation in the noninstitutional-care-benefits area. The base policy tends to offer the home health care benefit. Again, it's more of an indemnity benefit that's payable for services received from a home health agency. Some examples of these coverage services are those from a registered nurse, a licensed

practical nurse, a licensed therapist, or a home health aid. The products may vary in terms of how the benefits are paid, whether there's some flat amount, whether there's a percentage of the nursing home benefit, or whether they're even linked to the actual service costs. There may be a separate benefit trigger from nursing home.

In addition to the home health care, there are homemaker services, which is something that has come mostly with the newer policies. This is the expansion of home health care to include homemaker services such as laundry or cleaning, and the payment may be based on either the actual cost or some flat amount. The adult day care benefit is payment for being in an adult day care center. Typically the definition of adult day care centers today are standard. There are also other benefits such as durable medical equipment, case management services and others.

In addition to the homemaker and the home health care, most policies now offer the respite care benefit which is intended to provide short-term relief to the familial caregiver or informal caregiver. Again this benefit is typically some flat amount and is usually provided prior to meeting the elimination period requirement.

The elimination period is seen in all LTC policies and is typically the period between the time the benefit eligibility criteria is met and before the benefits become payable. There are usually two types of definitions for an elimination period that we've seen. One is based on calendar days and the other is based on actual dates of service use. There doesn't seem to be much difference in how these definitions of elimination period affect nursing homes, but there may be a bigger effect on home health care. Typically, some home health care services are received three times a week as opposed to seven days a week.

The benefit period refers to the period during which benefits are payable. This is not the same as the period of coverage. Typically the period of coverage begins on the policy issue date. The benefit period begins after the elimination period has been met and before the coverage terminates.

In addition to some of the base policy benefits, there are now options such as nonforfeiture benefits. There are various kinds of nonforfeiture benefits ranging from reduced paid-up benefits, return of premium, extended term insurance, cash surrender value, or shortened benefit period. Most of these try to continue the LTC coverage either by reducing the benefit amount (reduced paid-up benefits), by reducing the period of coverage (extended term insurance), or by reducing the actual benefit period keeping everything else constant (shortened benefit period). Both the return of premium and cash surrender value provide some kind of benefit at the time of lapse in terms of either a cash value or premium return.

Most policies also offer inflation protection that vary in many different ways. There are four kinds that we know of: the index inflation option, the annual simple inflation option, the compound inflation option, and the purchase of attained-age pieces. Typically the index inflation option allows more coverage to be offered, which is linked to the consumer price index (CPI), but it's purchased at the attained-age premium. The annual simple-inflation option and the annual compound-inflation option increases the benefit. It's almost like increasing a benefit with a level premium and the only difference between simple and compound is the way the benefits increase.

I mentioned the benefit triggers earlier. Medical necessity typically requires physician certification and is based on medical diagnosis; functional necessity is based on the ADL criteria and typically assessed by a case manager; and cognitive impairment requires a mental status questionnaire or a Folstein test.

In addition to the varying policy features, there are usually two different types of benefit structures that we've seen in many of the LTC policies. What's interesting about this is that it really makes a big difference in the way you look at some of the valuation issues for these two types of approaches. There's a continuum within these two basic approaches. I call them the expense incurred model versus the disability income model. They are different in that the expense incurred model reimburses charges based on actual services and the cost of services received, whereas the disability income model tends to provide a flat amount of benefits based not on the cost of the services but on whether the services are being received, either at home or in a nursing home. That could make a big difference as far as the valuation is concerned.

There are also limited-pay policies which are paid for in a few years.

The alternate plan of care and bed reservation benefits are two newer type features that are being offered in today's marketplace. The alternate plan of care covers services not usually covered by using case management to help determine whether the use of such services would actually make it more effective from a cost standpoint and is actually better from the insured's point of view as well.

The morbidity experience tends to vary significantly depending on how the benefits relate to each other. For example, nursing home morbidity costs are higher with stand-alone policies than in combination with others.

MR. MUNSON: I think it's worth adding that there are a ton of variations and that's why we were told not to come up with a table or tables but do it within the concept of the valuation actuary. We couldn't conceive of enough tables even if we tried. That doesn't mean an individual actuary can't price or reserve for a specific product. It seems to me that's a very different challenge than to come up with a standard that you'd apply to everybody's products. Because of the kinds of things that Loida just identified our challenge has been to try to come up with something for all of us, and that's much tougher.

MR. ROBERT M. DUNCAN JR.: A short question on the nonforfeiture section. It doesn't seem to mention that the benefits utilized prior to the eligibility period for nonforfeiture can be subtracted from the nonforfeiture benefit and if those benefits exceeded the value, the nonforfeiture might not be offered at all. Or is the intention that the nonforfeiture is only intended for people who don't use benefits prior to the eligibility?

MR. MUNSON: Bob, that's a good question. We haven't done much as a task force on that for reasons Peggy will talk about later. Another very clear area is data. That's the next chapter.

MR. FRANK E. KNORR: Chapter 5 is LTC data. I guess what needs to be said to the valuation actuary is that your valuation should be based on the data of your own company. That's the ideal source of the data. That's probably not material, so the next source of data for valuation and the source of data for an industry table ought to be industry data. Up to this point there has not been much published intercompany data available.

This brings us to what we should recommend as data for valuation purposes. What we've come up with is essentially what you've all been using as data and that is population data based on the 1985 National Nursing Home Survey for institutional care, which we'll talk more about in Chapter 11. There is also the 1982, 1984, and 1989 National LTC Survey for noninstitutional benefits. The valuation actuary should be reminded that once intercompany data come out, they need to be taken for what they are. There are many old policies in there. There are policies in the early policy durations where the underwriting selection is still in effect. Also even when working with population data, there are no selection factors in those tables.

There's one last thing I'd like to say about data. In the past I've worked on disability valuation tables, and I've worked on committees that put together the 1985 Commissioner's Individual Disability Table (CIDA) A and the 1987 Commissioner's Group Disability Table (CGDT). One thing that's noticeably different in this task force compared to those committees is the availability of data, first of all, and also the willingness of different people to talk about the data of specific companies. We are very sensitive and very aware of the proprietary nature of the data that is available. It may have slowed us down a little bit, but I think it's necessary. I think it's a sign of the times.

Chapter 6, "General Valuation Approach," also is mine. This has a list of things that I won't go into. It's generally how to use this exposure report once it has been exposed. What we're trying to say in this chapter I'd like to compare to an analogy of a valuation vacation. If you think of doing your valuation in terms of going on vacation, you could think of this report as your checklist of the things that you have to take with you. One of the things that you have to take is a road map, and we have actuarial standards of practice, regulations, and model regulations that we can use as a road map. We have some standard baggage and we have our own personal baggage. The standard baggage are things like the interest rate, the mortality, and the methods. There's some specific baggage like the lapse tables, lapse assumptions and the adjustments to the morbidity. On your vacation you'll also need some form of transportation, some kind of system to get you to where you're going. That's being made available in the form of a diskette. We're providing some public transportation but you may not think of that as what you would like to build into your own system. You may have your own system needs. The diskette should not be the primary output of our task force's work. That should be the exposure draft. I guess you can say that you can try going on vacation without transportation. That's like walking to your vacation. You'll probably need some sort of system. Also I guess you could say you'd need some kind of camera. Whenever you go on vacation you need a camera or you need to record what was going on. You have to look back and see how your assumptions worked. During the exposure period, we would like to hear from you, perhaps get a "postcard" from your valuation.

Chapter 6 is a link between the first five chapters and Chapters 7 through 13. The first five chapters introduce the task force and LTC, and the next chapters define what the parameters are for a valuation table: the mortality, the morbidity and the interest rates. Then Chapters 14 through 28 discuss some adjustments to the valuation.

MR. MUNSON: Frank, *LTC Valuation Vacation* is a movie that Chevy Chase will never make. Dennis is going to take the next three chapters, not because he's responsible for the mortality, the lapses, and the interest rates, but because they are related. As Frank said, we're getting into some specific things that we've struggled with as a task force like, what should the standards be? Dennis is going to lead us through those at this point.

MR. DENNIS M. O'BRIEN: I'm going to talk about the mortality and the lapses together because we thought of them very much together. There's no way to really do a mortality study on insured LTC lives, so we were forced to try to determine what was an appropriate mortality basis. We recognized immediately that since this is a lapse-funded product, a conservative approach to terminations would be to allow the use of terminations in the valuation that are lower than what are actually expected. So using loaded life valuation tables is clearly not an appropriate basis for the kind of mortality that we wanted to have. We started off thinking that maybe unloaded life valuation tables with some reduction would be appropriate. It turned out that the group annuitant mortality (GAM) 1983 table at most of the ages for which this business is sold and will remain in force varies between 75% and 85% of the unloaded 1980 CSO table. Based on what we were trying to achieve in terms of having conservative, that is lower, mortality terminations in the valuation than what we expected, we felt that the GAM table seemed to be where we wanted to go.

We also recognized that if we were going to have conservative mortality, we also ought to allow voluntary lapses to be used. That's in line with the new standard valuation of health insurance which allows 80% of total price determinations to be used but with a ceiling of 8%. We knew that for the upper ages that 8% ceiling would eliminate the additional allowance for lapses in many cases, so we decided to take that out, to allow the use of 80% of pricing lapses up to 8% in addition to mortality.

I've heard some criticisms about the mortality basis, but I think that maybe if you understand what we're trying to get at, and with the addition of the voluntary lapses, I think the task force felt that we have a reasonable basis for total terminations.

An additional thing that we decided to include in the standard was that if voluntary lapses are used in the valuation that some recognition has to be given to antiselection on lapses. The document is silent about how that's to be recognized. Here, as in many other places, we've given a great deal of discretion to the actuary on what to do. So if you use voluntary lapses in the valuation, you'll have to give some recognition to antiselection on lapse.

The other thing we haven't really addressed is how the nonforfeiture values enter into the valuation. We haven't completely nailed down what we want to do other than to have a cautionary note in the exposure standard with some promises to do more

work later. Part of this is motivated by the fact that we know we're going to get some nonforfeiture standards soon, plus the fact that we can't anticipate every nonforfeiture basis that the company's going to choose to use. If the nonforfeiture scale is rich, it might not be appropriate to just allow that the reserve has to equal the nonforfeiture value. So we left that as an open item. We will be doing some more on that later this year.

MR. KERRY A. KRANTZ: I've used the disk that was sent to me by Jim Robinson to look at things and one of the points on the mortality table to be aware of, is that the 1983 GAM table is extended several years beyond age 100. So when looking at the effects of either the 1958 CSO or the 1980 CSO (because both of those go only to 100), you'd notice a convergence of the two, whereas with the 1983 GAM the mortality is lower for a longer period.

MR. O'BRIEN: We specifically wanted a mortality table that extended beyond age 100, because we felt like the arbitrary cut-offs that are used in life might not be appropriate for this.

MR. KNORR: I've done some work on the impact of the 1983 GAM compared to the 1980 CSO basic table. In a sample, generic 65-year-old's nursing-home-only policy, the reserve would increase by 10% if going from the basic table to the 1983 GAM, based on some calculations I've done with an earlier version of the diskette. Some voluntary lapses I've put in amounted to reducing the reserve level by about 12%. So that can give you an idea of what the impact of a couple of these are.

MR. MUNSON: The task force doesn't have the diskette yet, the one that's ready for exposure, so we have not really done much of the testing. As Frank said, we've done some work to try to come up with reasonable things in these chapters. As soon as we can all work on that from a common base then we'll do further testing. But those comments are helpful, Frank, because I think we haven't taken these positions in a vacuum. We have been trying for the last year or two to make good sense out of the options that we see available to us.

MR. O'BRIEN: There's no need to belabor the interest rate very much. It's going to be the same for most other health insurance. For contract reserves, it's the whole life rate and the year of issue, and for claim reserves it's the whole life rate and the year of incurral.

MR. MUNSON: It's about that simple.

MR. O'BRIEN: We didn't need to be pioneers on this part of it. We have enough problems already.

MS. HAUSER: The valuation method related to LTC is a fairly touchy subject. As I mentioned before, the current NAIC model states that the valuation actuary should use one-year preliminary term. On the other hand, the Internal Revenue Code (IRC) prescribes two-year preliminary term for tax reserves. This discrepancy between statutory and tax reserves hurts the insurance companies by limiting their reserve deductibility, especially in that second year. That does have an impact and can have an even more significant impact on your after-tax profits.

Our draft right now says that our task force has not reached a final decision but that we are leaning toward the one-year preliminary term method. However, we are very open to input from practicing LTC valuation actuaries. I want to tell you about some of the background and some of the research that we've done and also just give you an idea of some of the discussions we've had.

Early on we spoke to the NAIC Life and Health Actuarial Task Force to ask its opinion on what would be an appropriate reserve method for LTC. They came back to us with the opinion that the one-year PT was appropriate, based on some calculations that they did. They compared first-year relief under a typical LTC policy to typical acquisition costs. By first-year relief I mean they calculated the difference between the statutory net level premium and the first-year claim cost. They tested a range of acquisition expenses, but it appears that they focused on acquisition expenses of 45% of premium plus $100 per policy. It was their feeling those were typical excess first-year acquisition costs. I want to specify that these are first-year excess costs, so this isn't the total cost in the first year but the excess of the first year over renewal. Based on their review, they found that the first-year relief was adequate to cover the acquisition expenses, and based on that analysis gave us the opinion that the one-year PT was appropriate.

As I mentioned, that was early in our process, and I think that over the last several years there has been a significant increase in the amount of underwriting that LTC insurers are doing. Associated with that increase in underwriting, there has also been an increase in underwriting costs. In particular, insurance companies are commonly using attending physician's statements (APS) 100% for older issue ages and are also commonly conducting face-to-face interviews of prospective insureds that might entail doing some cognitive impairment testing up front. So we thought that maybe we should update the testing that had been done previously to recognize some of these increased acquisition costs.

The testing that we did had significantly higher assumptions. One set of our assumptions relied on 75% of premium plus $300 per-policy first-year excess costs. This analysis showed that, in all cases, the one-year preliminary term would not provide enough first-year relief to cover the acquisition costs and that maybe that analysis indicated a two-year PT would be more appropriate.

The task force had three concerns about that analysis. First, not all companies are doing the same amount of underwriting. I would suspect that there are companies that are incurring higher first-year excess costs than what I mentioned we used in our analysis, and I would imagine many companies are experiencing lower costs or at least are reflecting lower costs in their pricing analysis.

A second concern is that we aren't certain that these higher underwriting costs, if they are appropriate, will continue in the future. As underwriting of LTC matures, will the costs for these interviews and testing procedures drop? Third, we were concerned that the methodology is based strictly on first-year relief versus acquisition costs. Is that really an appropriate basis for the method? Statutory reserves are intended to be conservative, but I think that there's a gray area. I don't think it's black and white as to what is conservative and what is adequate.

We've had many discussions about the preliminary-term method. Some have argued that perhaps this is a riskier product, therefore that might call for a stronger reserve level. On the other hand, we've also argued back and forth that perhaps our charge on this task force of actuaries is to provide recommendations based on actuarial analysis and that we should concentrate on that aspect. Also, perhaps the riskiness of this product would be more appropriately reflected in your risk-based capital (RBC) formulas than in the reserve method.

In summary, we've done a great deal of thinking about this. We've battled back and forth quite a bit and right now we're leaning toward the one-year PT, but we by no means have made a decision and we would like to get input from practicing actuaries. In particular, we would like to hear what you think the relevant issues to the method are, and what analysis should be done in coming to a decision.

MR. ROY GOLDMAN: As far as actuaries recommending reserves, the reserves shouldn't be related to giving relief for acquisition costs. Higher costs of the underwriting procedures presumably results in lower morbidity. It seems to me that the adjustment we should be making would be in the morbidity tables. Allow certain select morbidity tables based upon what kind of underwriting you're using.

MR. MUNSON: I would say you've touched on several issues, including selection and antiselection. I gave an oral report to the Life and Health Actuarial Task Force at the NAIC, as we've done every six months. We talked about our exposure report. I identified a few areas that we particularly wanted input on. This was one, and it certainly made them nervous. They made the point that we should try to do what's right for the SOA. Nobody's disputing that. We wish we knew what that was. That isn't quite as easy as you would think. It's neither black nor white. Loida will discuss tax reserves, and we know that that's an impact that's related to this.

We also know that the regulators have a one-year model regulation. They don't use one year in every state, but it is not a very good time to go to the regulators and say, "We need something weaker on this product." So I tried to be very neutral and didn't predict anything to the regulators. But I can tell you that when I was done their comments were along the line that we must do what's right as actuaries and as regulators and we shouldn't care what implications it may have. It's a rough paraphrase, but many of you were there; it's a hot topic.

MR. DUNCAN: Let's say companies have an upgrade program, in other words not the simple or compound inflation. Say five years after the policy is sold, they allow the policyholder to select an increased benefit. I would recommend that the net level of that be used for the incremental reserve. It's my personal preference.

MR. MUNSON: That's another input on maybe different reserves for different pieces.

MR. DOUGLAS M. PRICE: In the testing that I've done, when you use a two-year preliminary term method for LTC, what you have are large profits early on. Then you have losses, built-in losses, down the road. When you run that with the one-year preliminary term method, you recognize your loss in the first year but then you have statutory gains all along the way. I think it's a poor design to have built-in statutory losses 15 or 20 years down the road.

FROM THE FLOOR: I'm just wondering, was there any consideration given to what the Canadians did with their tax reserves which was a 1.5 preliminary term which is between the two?

MR. MUNSON: No, there wasn't any consideration of 1.5. That's not to say there shouldn't be. I'm not familiar with it.

MR. KNORR: Bart, I'd like to throw my two cents in. It kind of goes along with that. I expressed my opinion a couple of times at our meetings and it was obviously a minority opinion, but I feel that if the issue is about acquisition cost and the acquisition costs vary from company to company, why not use the acquisition cost directly with some restrictions. There are companies that have high first-year acquisition costs of what amounts to two-year preliminary term and people with low costs have one-year preliminary term or even a full net level if there are no appreciable acquisition costs. I feel that's justified. I feel that that's not more unreasonable or more complicated than saying that you have different lapse rates in your pricing. You use different lapse rates in your valuation based on those pricing lapse rates. It's the minority opinion.

MR. MUNSON: We haven't been able to discover very much good research on other products with regard to net level, one-year or two-year PT. That doesn't mean we shouldn't try to get some, but I don't think we've found much in good models in our profession or in regulatory circles that tell us how we got to where we are in other products. So what do we compare to? Why do we have two-year PT on medical products? Why do we have one-year limits on life insurance? We start comparing costs, first year and renewal, and at times I think we feel we're plowing new ground under the umbrella of LTC, but it could be applicable to many other products also.

MR. KNORR: Chapter 11 is on Institutional tables. They have been published in the *1988–89–90 TSA Reports* as a report of the Society's LTC Experience Committee. The work was performed by a subcommittee, chaired by John Wilkin, with Gordon Trapnell and Holen Chang. We've referred to these in some of our discussions as the John Wilkin tables or the 1985 National Nursing Home Survey. He has done a great deal of work to come up with something that we can compare to insured lives. You can read about that in the article, and there is a little briefer discussion in Chapter 11.

The table is gender and age based. For a female at age 65, there are about five per 1,000 being admitted into a nursing home and that rate increases by about 15% a year up to age 85 where it's about 96 people per 1,000 being admitted. The only other thing I'd like to say is that you need to keep in mind that there's no antiselection or selection involved in these tables.

MR. O'BRIEN: Chapter 12 is noninstitutional. We found the noninstitutional part to be the most difficult part of the whole effort. Actually we were hoping that the Experience Committee was going to take us off the hook on this. Given that we didn't have anything, we searched around for all sorts of data. We tried having companies put things together and sniff them for reasonableness; but at the end of the day, when somebody just pulled something out of the air, we couldn't defend where it came from so it's hard to just throw something out. There is a description of how we got to what's in the exposure draft. Basically it's a longitudinal study

from the 1982-84 National Long-Term Care Surveys. The attempt is to identify new incidence of disability. So what is in the standard for the noninstitutional table are incidence rates of new disability for quinquennial ages for males and females and also the average number of noninstitutional days associated with each disability.

There's a great deal of freedom given to the actuary in how to apply these; several adjustments are needed, some of which could be very great. Since these aim at disability days, if your contract provides benefits only in the cases where services are provided, you have to adjust the disability days downward to account for the number of days on which no covered services are rendered. The other thing is there's a pretty comprehensive set of tables that allow adjustments to the incidence and lengths of stay based on ADL triggers. So there's a great deal of freedom to the actuary on how to adjust for the contract triggers in terms of whether it's one, two, or three ADLs and whether cognitive impairment is covered or not. I myself have opined to the task force that I think that perhaps fine distinctions in ADLs may be overblown in that if somebody is receiving care I think they're probably going to jump through the appropriate ADL hoops. But there is a lot of detail here for actuaries who are inclined to try to make adjustments based on the ADL triggers.

For benefit limits, there are continuance assumptions in there by ADL, by number of ADL impairments, and by whether cognitive impairment is part of the trigger. The tables are a little bit cumbersome to go through, but I think that if you go through the example in the book, you'll find that for your particular contracts you can generate a set of claim cost tables.

This hasn't been given much review by the task force. One of the things we're hoping to get out of this and the exposure is a sniff test from any companies that have insured home health care experience. Just give us a reality check on the magnitude of these claim costs. So I encourage any of you that have any experience to look at how these would apply to your business and whether you can fit your experience into the freedom allowed by these tables. I'm not going to bore you with a description of how they're calculated. It's a little tough, but it's here for those that want to see it.

There is a great deal of freedom given to the valuation actuary on how to apply them, so we're hoping that they will serve as a suitable standard until more experience comes out.

MR. MUNSON: Dennis, I think, is entirely right to say that nothing came close to this subject for slowing us down as a task force. People tried within the task force and we tried outside, and if anybody has a better approach and better numbers for a good basis for noninstitutional benefits, tell us. We really do want input and help, but we think we have something here. I would caution you, though, as somebody told me recently, as soon as this gets out everybody knows now what chapter to use to price their home health care. If you want to do it, you do it at great peril to yourself. That is not what it's for and that's not what we're intending. Misuse this or anything else in the book at your own peril. We'll do better when we get the actual report, not necessarily on the content of these tables.

There are products, as Loida said, that are only institutional and other products that are only noninstitutional and an infinite number of blends between. What do you do with it? Through a couple of chapters and through the use of a diskette there is help to you valuation actuaries as you try to blend the two the way you want to. Peggy, how about the next section, which also gets to the question of antiselection?

MS. HAUSER: Right. Chapter 14 is on selection underwriting and antiselection at lapse. I think underwriting is critical on LTC. My experiences have been that any lack of proper underwriting can lead to very poor experience. If you recognize the impact of underwriting, that will tend to steepen your claim costs and will therefore increase your reserves. That is given that your selection factors grade into a factor of one. I think that Roy is suggesting that perhaps the underwriting factors should grade into a value lower than one. If you are incurring heavy acquisition costs in underwriting, you may grade to a factor lower than one. That contradicts what we have in the exposure draft in this chapter where we say we think that the actuaries should consider using the pricing selection factors in calculating reserves. However, we suggest grading the selection factors into an ultimate factor of one by duration ten. It's open for debate whether you can do such good underwriting that you can indefinitely maintain a better block of risks over the entire life of the policy. I think that perhaps we're a little bit too strong here. We're interested in input again. That's a little description of what is in the draft now.

Related to adverse selection on lapse, what we're thinking is that the individuals who lapse their policies are going to tend to be healthier individuals than those who persist. If you are in poor health right now and you perceive that you will have a need to use LTC benefits, it's unlikely that you are going to lapse. Therefore, once we have lapses, the average morbidity for the remaining group is going to be higher than it was previously. So what we're recommending is that if the valuation actuary chooses to use termination rates in their reserve analysis, they should also reflect that those lapses will produce some adverse selection. The diskette has a method of recognizing that adverse selection but requires the judgment of the user; you can read the document to find out on what the theory behind it is based.

MS. ABRAHAM: I can quickly summarize the next two chapters about adjustments to product features and to benefit triggers since I've said so much about them previously. I think the only points we really want to make in the next two chapters is to recognize that the standard tables or the tables in this diskette may be different from what your claim costs might look like for your particular situation because of the different product features and because of the different benefit triggers. Think about that very carefully, particularly if you have a stand-alone nursing home only versus a stand-alone plus home health care. It makes a big difference in terms of the claim costs. The only other thing that does make a big difference, which we already talked about, was the expense incurred versus the disability income model.

MR. KNORR: Chapter 17 is on adjustments. Premiums for LTC vary by things like marital status, state, and risk classification. LTC insurance has kind of evolved out of Medicare supplement, disability income, and life insurance plans where everything is age and gender based, and I think that if it had evolved independent of insurance marital status it would have been much more prominent in the pricing and valuation of LTC. After all, the C in LTC is very important in marriages. When you have a

spouse who's ill, the other spouse will care for that person before they send them to a nursing home or have someone come into the home and care for them. I think that this type of information is shown in the population data. It's very dramatic that married couples have lower incidence rates and shorter lengths of stay. Once we have some monetary incentives in the form of insurance, it may not be as dramatic, especially when we're talking about home care. If there's an insurance policy available to have someone come into the home and help out with a spouse, there are certain impacts that need to be considered.

States have different regulations concerning state-mandated coverage and certification of nursing homes which impact the morbidity. They also have regulations on loss ratios which should not impact the morbidity. There are certain regions of the country that have more services available than other regions. These are things that don't vary by state lines and those need to be considered.

The only thing I'd like to say about risk classification is smoking is usually part of risk classification, but it varies all over the place from company to company.

MS. HAUSER: I think there are two special reserves related to nonforfeiture. First, once a person is in paid-up status, what do you do? I think you must be holding the present value of future benefits. Obviously there's no reduction for premiums. I think that the actuary should consider including a load to reflect the riskiness that we have now that there are no more premiums coming in the door. I could argue that once you're on paid-up, those loads should vary depending on the riskiness of the particular nonforfeiture benefit you have.

The second reserve related to nonforfeiture benefits that you must be thinking about occurs while the person is still in premium-payment status. I think you've got to hold something to reflect potential future nonforfeiture benefits. It's no longer clear to me what the conservative lapse assumption should be, and I think everybody has to test the zero lapse scenario depending on what risk margin you add and how comprehensive the nonforfeiture benefits are. That scenario has to be tested.

In regards to the question brought up earlier, I'm not certain that you can't design the nonforfeiture benefits both ways—either they stand alone or they're reduced based on what you used during payment status. I think that feature has to be recognized in the reserve. I could argue that it would either increase or decrease the load. Either you could increase the load because that person had a claim before—they might be more likely to have another claim—or it might reduce the load because they have fewer benefits left. I'm not sure what I decided on that in that little time I had.

MR. MUNSON: We talk a great deal about claim costs and morbidity, but we really need to worry more about slope and impact on reserves, not just cost. So we'll test and find out more about that.

MR. O'BRIEN: Claim reserves were a little bit controversial when we were working on the actuarial standard of practice for LTC. We ended up with something that didn't really have very much teeth in it. We decided to move more toward the disability income model where for institutional claims disabled life annuities are essentially required for claim reserves. For home health care, there's more freedom,

given that the contingency for home health care usage varies so much among companies. There's more freedom given to the actuary, except for claims where 90 days of service has been received, the actuary must put up a case-by-case reserve based on claim termination rates that he establishes. So it does force the actuary to set up a case-by-case reserve.

There's also some kind of ground-breaking language regarding the dating of home health care claims. It essentially says that you can't blindly rely on a service date definition in your policy to establish low claim reserves for home health care. It just didn't seem appropriate in a case where somebody was receiving home health care, say three, four or five times a week, for the company to rely on a service date definition to say that on the valuation date all payments made after January 1 are future claims. So we've taken a stab at establishing a minimum standard; you backdate your claims based on your contract definition, but if your contract definition is more liberal than establishing a new claim, when there are 14 days of no service, then you have to backdate the incurral date based on that more conservative view. So it may establish incurred date backdating beyond what the contract calls for, but we thought that was appropriate. We would like to hear input on that.

MR. KNORR: One last thing on the claim reserves. We determined that when premium waivers are in effect, there should be a special premium waiver reserve.

MR. MUNSON: Peggy, could you take a few seconds to talk about RBC, because of what is going on in the environment at the moment on that subject.

MS. HAUSER: I think what is in the exposure draft about RBC may become obsolete in the near future. Recently, an Academy committee submitted a report to an NAIC working group related to RBC. In the report it was recommended that LTC have its own factor and that the factor should be 150% of premium. I would think that people are probably using a factor similar to disability, which would be 10-25% of premium. I think that the Academy committee is looking for input on their work from the industry. They haven't finished their modeling, and hopefully it won't stand at 150%, but everybody should be aware that it's a possibility.

MR. MUNSON: We recognize, as a task force, the link between reserves and RBC. We were not involved in RBC work. Maybe we should have been.

MS. ABRAHAM: Basically on tax reserves, the IRC has no specific language for LTC, knowing that there is some controversy with regards to whether or not the guidelines for noncancelable A&H insurance does reflect or should be used for LTC. Some people have advocated that it does. If so, you get the problem where it uses the two-year versus the one-year preliminary term method that has been recommended. The tax law ought to be changed, and there are some people working with legislators to do so.