SOCIETY OF ACTUARIES

August 2002, Issue No. 6

# Long-Term Care News

The Newsletter of the Long-Term Care Insurance Section

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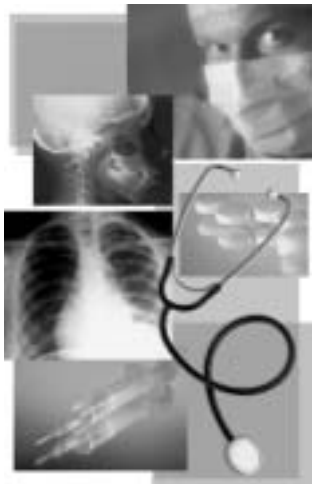
## Long-Term Care Insurance

### Many Markets, Many Products

by Lawrence L. Hoffman



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After many years marketing long-term care insurance, success in this market is still hard to come by. An unfulfilled, large and growing market exists for insurance responses to issues related to funding the costs of long - term care. Over the years, many excuses have been given—the public believes Medicare will take care of long-term care expenses, the relatively high cost of insurance, buyer denial, and the idea that you don't need long-term care insurance if your assets and/or income are greater than some arbitrarily established threshold—to name a few. The Medicare excuse has been largely overcome, and premiums are affordable for a wide range of buyers in the prime age 50's market segment. As for buyer denial, perhaps it is a cover for the frustration at not being able to determine, even with the help of an agent, for how long benefits should be payable and how much benefit will I need 10, 15 or 20 years from now when the benefit will be called. (Who can predict with any certainty that a five percent inflation factor over such a long period of time will be adequate?) For the wealthy and the high earners, estate planning and asset distribution issues become even more complex given the need for long-term care.

In addition, because of the way long-term care is delivered is still evolving, today's policies may not meet the long-term care delivery model 10, 15, or 20 years from now. Look how long-term care insurance has evolved from pure nursing home care to including home care, assisted living care, community care facilities, and Alzheimer care units in an after-the-fact effort to keep pace with the evolving long-term care delivery model. Who knows what will come next? How can we expect today's policies to cover tomorrow's realities, when yesterday's policies don't cover today's realities? Long-term care is a work in progress, still evolving. Insurance product development should also be an evolving work in progress.

Given today's realities, perhaps the reason (not the excuse) for lack of market success is that something has been/is wrong with the product being offered. Perhaps once again, the life insurance industry, in consort with the regulatory authorities, has created a product design (while much better today than yesterday, and certainly much better than nothing at all) that is inherently flawed.

Success in the marketplace can be achieved when there are proper alignments of market, product and distribution. The market exists and the need is evolving, and since many forms of distribution have been tried with limited success relative to the size of the market, perhaps focus on the nature of the market and the fundamental product design is long overdue and can help lead us to answers.

Current long-term care insurance has design attributes common to disability insurance (dollars per day for a period of time subject to certain triggering events

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475 N. Martingale Road, Suite 800
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Phone: 847-706-3500
Fax: 847-706-3599
World Wide Web: www.soa.org

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Bruce A. Stahl, Newsletter Editor
Penn Treaty Network America
146 Lakeview Drive • Suite 203
Gibbsboro, NJ 08026
PHONE: (856) 566-1002
FAX: (856) 566-5165
E-MAIL: bstahl@penntreaty.com

Joe Adduci, DTP Coordinator
PHONE: (847) 706-3548
FAX: (847) 273-8548
E-MAIL: jadduci@soa.org

Clay Baznik, Publications Director
E-MAIL: cbaznik@soa.org

Lois Chinnock, Staff Liaison
E-MAIL: lchinnock@soa.org



# Articles Needed for the News

Your help and participation are needed and welcomed. All articles will include a byline to give you full credit for your effort. *Long-Term Care News* is pleased to publish articles in a second language if a translation is provided by the author. If you would like to submit an article, please call Bruce Stahl, editor, at (856) 566-1002.

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## Preferred Format

In order to efficiently handle articles, please use the following format when submitting articles.

Please e-mail your articles as attachments in either MS Word (.doc) or Simple Text (.txt) files. We are able to convert most PC-compatible software packages. Headlines are typed upper and lower case. Please use a 10-point Times New Roman font for the body text. Carriage returns are put in only at the end of paragraphs. The right-hand margin is not justified.

If this is not clear, or you must submit in another manner, please call Joe Adduci, 847-706-3548, at the Society of Actuaries for help.

Please send a hard copy of the article to:

Bruce A. Stahl, ASA
Penn Treaty Network America
146 Lakeview Drive • Suite 203
Gibbsboro, NJ 08026

Phone: (856) 566-1002
Fax: (856) 566-5165
E-mail: bstahl@penntreaty.com or BASActuary@cs.com

Thank you for your help.

SOCIETY OF ACTUARIES

# Chairperson's Corner

by Gregory A. Gurlik

Welcome to those of you who are new to the LTCI Section and perhaps getting your first opportunity to read our newsletter. That group now includes both actuaries and non-actuaries, as we've recently implemented the ability to have non-SOA members on our roster. A special welcome to you charter non-SOA members. I hope your membership is mutually beneficial and look forward to your participation in our Section activities.

I'd also like to extend a welcome back to those of you who may have missed regular LTCI Section newsletters for the past few months. I won't dwell on the details of the hiatus, but certainly a newsletter can't be published without members who are willing and able to share their knowledge and musings. I encourage each of you to consider one aspect of the business on which you feel you can share a unique perspective, and then commit that perspective to writing. Whether one paragraph or five pages, we will find your perspective a home.

Next, I'd like to recognize the passing of the baton in our LTCI Section Council members and leadership. My first order of business is to thank Amy Pahl and Gary Brace for their service as Council members over the two years ending last October. Amy has continued her involvement in Section activities by being our representative to the SOA 2002 Spring Meeting Program Committee and is also chairing the actuarial track for the Third Annual Intercompany LTCI Conference coming up January 26-29, 2003 at the Las Vegas Hilton. Gary Brace also continues to be involved by coordinating our breakfast session for the Spring Meeting.

I'd also like to welcome new members to the Council. Bart Munson worked closely with the Council for its first two years, serving as the initial editor of this newsletter. Phil Barackman also joins us for a three-year term. And last but not least, Jim Glickman returns for a full term after completing a two-year term last October.

We are a young section. It was just a couple short years ago that Jim initiated organization of our LTCI Section. He provided great leadership for our first one-plus years as our initial LTCI Section Council Chair, and continues to be heavily involved in Section activities today.

Loida Abraham stepped up to provide leadership for our second year. She did an admirable job helping us mature. On behalf of the Council and the entire LTCI Section, I'd like to thank her for her efforts. We are glad to have her continuing service this year as she completes the last year of her term.

Hopefully you've noted through all of this that there hasn't been a passing of batons so much as a handing out of more batons. Our past Council members continue to be involved. Involvement is not transient, but a way of professional life. I certainly hope to continue my involvement well after this October has come and gone.

Strong leadership does not just come from the Council; it is a culmination of the involvement of all of our Section members. Everyone can contribute.

We have great opportunities for those in our membership who are not LTCI specialists. You can help us define how we can best nurture and support greater LTCI understanding for new LTCI practitioners over the coming years. We also have tremendous opportunities for LTCI specialists to become integrally involved in developing our Section and preparing our members for the LTCI challenges ahead.

As a section, we are committed to developing, moderating and presenting a full slate of sessions for the Spring and Annual Meetings. We have also sponsored two very successful Annual Intercompany LTCI Conferences, and look forward to making that a great annual tradition.

So we always have one educational opportunity or another to develop. It is never too early to become involved, and no involvement is ever too little. Opportunities to become involved include:

- All of the above meetings need organizing committees, moderators and presenters.
- We need a team, or at least a liaison, to help us improve our Web site design and content.
- We need people to author articles for this newsletter.
- We need people to step up every year and say, " I want to be more involved by committing my time and skills to being a LTCI Section Council member."

And, of course, we need your ideas and input. We need your willingness to participate in our Section activities today. We need that participation today to ensure that all of our members get the support they need, so that they have greater opportunities tomorrow.

Our growth and success as a section will not depend as much on the strong involvement of a few Council members as it will on the combined efforts of a larger number of our membership. I encourage you to touch base with me or any of the Council members to let us know how you can contribute, or at least that you are willing to contribute. We will match up your willingness with an appropriate project, and you and our entire membership will benefit from it.

I look forward to hearing from you. □

Gregory A. Gurlik, FSA, MAAA, is Director of Long-Term Care Product Development at Northwestern Mutual in Milwaukee, WI. He can be reached at greggurlik@northwestern mutual.com.

**Perhaps it is time to consider that terminal LTCI is that "premature death" after all, and design LTCI around a life insurance model.**

occurring), as well as medical insurance (reimbursement for necessary covered costs—but only up to a daily limit just like disability insurance). Some real differentiation (ignoring all the bells and whistles that have been added over the years to try

to make the product more saleable and "different") has evolved—pure indemnification even when there are no costs of care to reimburse/indemnify, and an expense incurred reasonable and customary reimbursement "major medical" type model. These have met with limited success as well; but, these relative successes reflect that there are different market segments to be exploited.

The newly evolving annuity model—kick-up in monthly annuity payments for covered long-term care—makes sense; but, it inherently narrows the market by entry age and entry price. However, it is a step toward expanding the market from the present "one size fits all" mentality.

Over the years, we have sold life insurance "in case of premature death" (without having ever explained what is "premature" about any death). Perhaps it is time to consider that terminal long-term care is that "premature death" after all, and design long-term care insurance around a life insurance model. While there is a certainty to death, the odds of needing long-term care, particularly at advanced ages, are quite large.

Regulatory constraints have helped create the current "one size fits all" product mentality (for which there is admittedly a large and growing market). For example, the expense-incurred reasonable and customary reimbursement "major medical" model ran into stiff resistance in several states and was forced into a per daily maximum benefit design in some states. Creative ways (not necessarily uniform) for handling the reasonable and customary definition had to be devised.

Just as life insurance products lend themselves to flexible and creative long-term financial and estate planning, so should long-term care insurance—no matter what shape or design it may take. The annuity model, including private pay annuities, is a first step, albeit for narrow market segments. Other product designs based on life insurance and other annuity models could target other market segments to help create a robust market for solving insurance funding of long-term care needs. Capture the imagination of the big-ticket life insurance producers and see how fast the notion that you can be too rich to need long-term care insurance disappears.

The long-term care insurance market needs to be segmented and matched with other product designs, and aligned with the right distribution channels. To accomplish this, actuaries and marketers have to climb "out of the box" to work together to overcome product design, pricing, reserving and regulatory problems.

Designing products that are targeted to various market segments should be relatively easy. The hard part will be getting insurance companies to step up to the plate. The harder part will be trying to get the regulators out of the box that they, with the help of the life insurance industry, have created. Erasing what has already been chiseled in stone may prove the most challenging.

Until now, long-term care insurance has been essentially one product for one market. It is time to focus on various products for different market segments and address all the challenges. □

Lawrence L. Hoffman is an independent consultant to the insurance industry. He has over 12 years experience in LTC insurance product development, marketing, and administration. He can be reached at 973-701-6788 or via e-mail at LLHoffman@aol.com.

# SOA Holds 2nd Annual Intercompany LTCI Conference

Beverly Hills, CA • January 27-30, 2002

The Society of Actuaries held its 2nd Annual Intercompany LTCI Conference in Beverly Hills from January 27th to 30th, 2002. This conference attracted over 500 attendees from LTCI operations around the country, in what has become the premier LTCI conference of the year. On Sunday, the conference began with a pre-conference networking reception. Originally planned as a Super Bowl party, it turned into a more business-like reception once the Super Bowl moved to February. Although it was unseasonably cold and rained most of the afternoon and evening, everyone in attendance seemed to have a great time.

On Monday afternoon, the conference began with breakout sessions, one in each of the six different educational tracks: Actuarial, Claims, Compliance, Management, Marketing and Underwriting. Monday evening featured a reception in the exhibit hall with plenty of food, networking and the opportunity to meet with over 35 LTCI vendors. The exhibit hall was also open for breakfast, lunch and another reception on Tuesday as well. Tuesday also featured three more sets of six breakout sessions. On Wednesday (the last day of the conference) the last three sets of six breakout sessions were held, including one with Trudy Lieberman of *Consumer Reports* taking some heat while explaining why *Consumer Reports* rates LTCI carriers the way it does. Also, on Wednesday, Virginia "Ginny" Naugle gave an inspired luncheon speech discussing what it is like to run a nursing home and care for those in need of our product.

Once again, the conference received rave reviews except, of course for the weather, which again managed to average 20 degrees below normal. In fact, while it was amazing to see last year's golf tournament in Miami played in below freezing temperatures, it was even more amazing to watch the evening weather report snow in Malibu on Tuesday night.

Perhaps the editorial written by Steven Piontek in the February 11th edition of the *National Underwriter* said it best in the box to the right.

### From The Editor-In-Chief of National Underwriter:

Breathes there a soul in the realm of insurance who has not had a laugh at the expense of actuaries? Admit it, actuaries have been the butt of at least one joke from a podium speaker at 98.67954% of the meetings you've ever been to.

But, after attending the recent Second Annual Intercompany Long-Term Care Insurance Conference put on by the LTCI Section of the Society of Actuaries, I've come to the opinion that our friends in the actuarial profession may very well have the last laugh.

In a word, this conference was terrific. Terrifically well run. Terrifically interesting. After going to industry meetings for over 20 years it is nice to be able to get really enthusiastic about a conference.

Especially impressive is the fact that this is only the second year this particular LTCI conference has been done.

Another impressive thing is how the atmosphere of the meeting shot holes in the stereotype of actuaries. There was interactivity galore during the sessions (at least the ones I went to). Opinions and contention were rampant and fearlessly expressed.

Of course, I suppose a cynic might say that all this talk and interaction were from the sales and marketing people at the meeting, and that the actuaries stood mute in small quiet huddles.
But I think not. There's something about long-term care insurance that brings out passion in the people who believe in it and want to see its mission fulfilled. And that includes not only the actuaries who work on LTCI products on a daily basis, but those who organized this meeting in such a way that everyone who attended went back energized to face the challenge of boosting LTCI sales.

Now is time to mark your calendar for next year's conference, which is expected to be the best one so far. The conference is scheduled for January 26th–29th, 2003 at the Las Vegas Hilton. See you there.□

# The Role of Actuaries in Non-Traditional Long-Term Care Insurance

by James M. Robinson

Editor's Note: the following article is reprinted with permission. It last ran in the October 2001 issue of *Actuarial Digest*.

When actuaries consider long-term care insurance (LTCI), they are usually thinking of private level-premium individual policies or group certificates issued by legal reserve insurance companies. While this form of coverage is fraught with interesting and unresolved issues, it is the center of much attention within the actuarial community. Witness the new LTCI Section of the Society of Actuaries, the new SOA-sponsored LTCI conference and Actuarial Standard of Practice No. 18.

Rather than add to the discussion of this "traditional" form of LTCI, I would like to devote this article to a related area of LTCI which receives less attention in actuarial circles. To this end, I use the term "insurance" in its general form and refer to any compensated transfer of long-term care (LTCI) risk between two parties. Many current government programs and health care provider arrangements clearly fall within this broad definition. In this article, I refer to such risk transfer programs as "non-traditional LTCI."

## Examples of High-Profile Non-Traditional LTCI Insurance • The Program for All-Inclusive Care of the Elderly (PACE)

The Program for All-Inclusive Care of the Elderly provides a full range of health care and LTCI services under a system of capitated payments from Medicare and Medicaid. PACE is an example of a growing care delivery and financing paradigm which transfers significant risk to predicating PACE sites in exchange for a fixed monthly capitation payment per member per month. Recent legislation has promoted PACE from demonstration to permanent provider status, meaning that the number of PACE sites is expected to grow significantly from the handful that made up the original demonstration.

The Centers for Medicare and Medicaid Services (CMS, formerly known as HCFA, the Health Care Financing Administration) has been busy constructing and implementing PACE site regulations while simultaneously funding research efforts to gain a better understanding of this new approach to care delivery. This is clearly an example of an area where the actuarial profession can play a useful role. Since I first became involved with PACE a few years ago, actuarial involvement in PACE risk classification and rate-setting issues has expanded HCFA's Office of the Actuary to a growing group of actuaries providing advice to existing and emerging PACE sites or to the state Medicaid agencies responsible for setting the Medicaid portion of the PACE capitation.

### *Medicaid Capitation*

A variety of states have implemented capitation arrangements with managed care organizations to provide LTCI services under the Medicaid program.

Wisconsin, a state with which I am quite familiar, is in the midst of developing and testing such a system, called Family Care. One of the key features of Family Care is a county-specific system of managed care organizations (MCOs), each of which contracts to provide LTCI services on a capitated basis for all Medicaid-eligible individuals who elect to enroll in the program in their county.

Wisconsin is grappling with the problem of defining the appropriate basis for the capitation payments to the county MCOs. What information is available regarding each enrollee? What part of this information should be factored into the rate

paid for each enrollee? How frequently should this information be updated after enrollment? These are all questions which would benefit from an actuarial perspective. Wisconsin has recognized the importance of an actuarial perspective on these issues and has contracted for ongoing actuarial advice.

## Examples of Low Profile Non-Traditional LTCI

PACE and Wisconsin's Family Care program are examples of high-profile public LTCI risk-transfer programs which, appropriately, attract significant actuarial scrutiny. At the same time, there are other, less obvious, risk-transfer schemes in place and under development which may not be receiving the actuarial attention they deserve.

Consider, for example, the increased use of price-based systems to reimburse nursing facilities and home care agencies for Medicare and Medicaid services. These new pricing systems replace traditional cost-reimbursement systems and pay providers a scheduled rate per resident day or per home care episode, regardless of the costs incurred to provide services. While these rates tend to be risk-adjusted, the risk-adjustment mechanisms are only expected to work well, on average, for large groups of residents.

I am most concerned with the well-being of the providers under these systems. While the payors (CMS and the state Medicaid agencies) have the resources and inclination to obtain the proper advice on rate-setting issues, this may not be true for the providers who bear the risk under these systems. It is true that many care providers are supported by industry organizations such as the American Health Care Association (which represents for-profit providers) and the Association for Homes and Services for the Aged (which represents tax-exempt providers). However, the focus of the support is often limited to an evaluation of the expected rate payment levels versus expected service costs, rather than an assessment of the risk of adverse deviation from these expected levels faced by individual nursing facilities or home care agencies.

Unfortunately, ever-tightening budgets, especially for Medicaid programs, will probably keep the spotlight on payment system rate levels rather than on the volatility of service costs assumed by the providers.

What is the appropriate role of actuaries in this situation?

• Should we lobby for appropriate risk premiums in the payment system rates?

In many cases, the rates are set equal to expected cost levels or to budget-neutral levels relative to the prior cost-based reimbursement system. Such rate levels make no explicit provision for a risk premium to compensate for the risk transferred from the payor to the provider.

• Should we suggest appropriate risk-pooling schemes or stop-loss arrangements?

Such arrangements were employed with new PACE sites. If a provider is not part of a chain, pooling arrangements with other providers may be mutually beneficial. As is the case with the more mature Medicare hospital prospective payment system, maybe the payor should be encouraged to establish a "carve-out" system which reverts to cost reimbursement for residents/patients with very high-cost profiles. This amounts to a form of individual stop-loss protection.

• Should we argue for minimum surplus and reserve standards for nursing facilities and home care agencies?

Regardless of how the prices are set in these systems, should providers be required to establish reserves based upon the evolving cost experience or upon more precise information on the prognoses for residents/patients than is used in the rate structure?

Suppose, for example, a nursing home resident's daily payment rate from Medicaid is a function of his/her health/functional/cognitive status using the Resource Utilization Group (RUG) classification system commonly employed

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**While these rates tend to be risk-adjusted, the risk-adjustment mechanisms are only expected to work well, on average, for large groups of residents.**

# Managing the Risks at Extreme Age —

## Underwriting at Ages 80+

by Stephen K. Holland, Patrick Snow and Janet Perrie

Underwriting at older ages has always been a challenging, subjective and daunting task, but little data exists on the underwriting and claims experience of those oldest individuals who apply for long-term care insurance (LTCI). Epidemiological data firmly establishes that the potential for functional and cognitive disability increases significantly as age increases and that life expectancy decreases with increasing age. Furthermore, conventional wisdom has it that adverse selection increases with age as premium increases to the point that a large proportion of those applying for coverage are willing to pay such high premium rates because they believe that they have a high probability of needing the benefit in their lifetime (e.g., adverse selection driven by special knowledge about their current medical condition).

Underwriting efforts that focus on very old LTCI applicants are comprehensive and in depth. At a minimum, they include a careful review of a detailed application, an attending physician statement from the applicant's primary care physician and often specialty physicians and an in-person assessment of activity, function and cognitive abilities. By the very fact that they are examined a great deal closer in underwriting, these older insureds may be actually "healthier" at entrance than those younger applicants that are accepted with less underwriting scrutiny (e.g., we've successfully excluded excess morbidity and mortality in the oldest applicants).

The underwriting impact of this may be compounded by the fact that the margin between functional independence and dependency may decrease significantly with increasing age. This margin can be thought of as the probability that someone can recover from an injury or illness (e.g., the health/functional reserve that allows someone to recover from an injury or illness). Thus we can conjecture that the "healthy" 90-year-old LTCI insured may be more prone to a prolonged disability when disabled by an injury or other illness than a "less healthy" 65-year-old with fairly robust reserves. We all have heard of someone's grandmother who was otherwise healthy and independent at the age of 95 who ends up in a nursing home in a dependent state for 10 years after a simple hip fracture.

Will LTCI underwriting's careful exclusion of significant co-morbidity in older applicants (e.g., an increased life expectancy) interact with a higher propensity for disability to produce a cohort of healthy but disabled individuals with an inherently higher propensity to produce claims of long duration? Is it truly profitable to insure those who apply for coverage at age 80 and older, and what are the underwriting and actuarial tools and assumptions that will help manage the risk in this older age group? We obviously need these older insureds to persist and pay premiums long enough to recover issue expenses, and thus it is imperative to carefully evaluate co-morbidity and functional abilities.

From a societal point of view, should the industry feel obligated to offer coverage to the very old? Is there so much profit and commission potential assumed in these older applicants that the industry doesn't see the extreme risks over presumptive profits? Is there underwriting and claims experience that can answer these questions, and what can an insurer do to limit the risks if they decide to do business at the extremes of older age?

### Fraternal Long-Term Care Insurance Experience

Above age 85, the proportion of the U.S. population residing in nursing homes rises to 20 percent of females and 10 percent of males. Consequently, both the interest in LTCI and the risk for anti-selection are high in this age group.

Interesting observations can be drawn from the files of an insurer with over 12 years experience in writing LTCI policies. The policyholders are members of a large fraternal benefit society and applications are accepted up through 84 years of age. One unusual characteristic is that agents and applicants are often well acquainted because of attending the same church.

These applications are fully underwritten, the acceptance rate is high and there is an assumption that field underwriting is done by agents who have such an intimate knowledge of their customer base. In the segment of these

policyholders over age 80, the following has been observed:

**Greater Early Claims.** It is not surprising that older policyholders have been determined to have a much higher percentage of LTCI claims occurring within two years of policy issue than do younger individuals.

**Longer Claim Duration.** Since life expectancy declines progressively as age increases, one might expect to see decreasing claim duration at advanced ages. An analysis of claims in this fraternal group has shown exactly the opposite to be true: claim duration increased moderately and progressively at older ages. This may be explained on the basis of health conditions that tend to accumulate with advancing age. By themselves, these conditions may have minimal effect on the ability for self care. But when new health problems arise, they may tip the scale towards a need for LTCI services. For example, the nursing home stay of a 90-year-old following hip surgery is more likely to become permanent because of a diminished reserve resulting from additional health conditions such as vision or cognitive problems. In contrast, a younger and more resilient individual is more likely to fully recover from their hip surgery and return home.

**More Claims from Multiple Impairments.** In this population, the top three discrete causes of LTCI utilization are dementia, stroke, and accidents. However, as age increases beyond 80 a progressively smaller percentage of claims is attributed to any single cause; a progressively higher percentage is attributed to a combination of several causes. These often include balance or vision problems, general weakness, nutrition problems, mild cognitive impairment, strokes, arthritis and/or Parkinson's disease. Oftentimes none of the combined causes would by themselves result in nursing home placement. But in combination, they may result in a frail 90-year-old with little reserve for maintaining independence.

**Many 90+-Year-Old LTCI Claimants Were Very Healthy as 80-Year-Olds.** At the time of policy issue (usually between ages 80 and 84) LTCI claimants between the ages of 85 and 89 often had serious disease, such as cardiovascular problems or significant arthritis. In striking contrast, individuals who first submitted LTCI claims at ages 90 and above were usually in excellent health at the time their policies were issued. Those healthy 80-year-olds have a greater likelihood of survival to age 90 and beyond, and to consequently develop a host of age-related conditions that lead to frailty and limit their independence. Lengthy LTCI placements may result, since these conditions are often non-life-threatening.

**Can Future LTCI Needs be Predicted for 80 to 84 Year Olds?** For 80-to 84-year-olds with conditions such as mild cognitive impairment, dementia or Parkinson's, the likelihood of needing LTCI remains high for the remainder of their lifetime. For most other individuals, a reasonable probability of future LTCI utilization can be predicted for three to five years. This can be based on information such as: a face-to-face evaluation to detect dementia and functional limitations; a review of medical records for stroke risk factors and conditions such as mobility or balance problems; and questioning regarding activities of daily living and instrumental activities of daily living. Eighty to 84-year-olds without significant medical conditions are more likely to survive beyond age 90 and ultimately constitute a large proportion of the future population utilizing LTCI services.

**For most other individuals, a reasonable probability of future LTCI utilization can be predicted for three to five years.**

## Group Long-Term Care Insurance Experience

Though many individual and fraternal carriers cap their eligibility at 84 years of age, many group carriers and affinity groups have offered coverage to those 85 years and older. In fact, the special role or mission of some groups often pushes the group into offering coverage for all eligible members of the group regardless of their age (e.g., there is no upper age limit). An analysis of underwriting and claims experience of one such group is now presented to further illustrate the challenges of underwriting applicants 80 years and older.

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Group A is a self insured affinity group that has offered LTCI since 1995 to members of their affinity group who are active employees, spouses of eligible employees, retirees and their spouses and parents of active employees regardless. There is no upper age limit of who can apply. Group A offers a yearly open enrollment period with solicitation by mail—there is little if any opportunity for field underwriting, though a limited listing of potentially uninsurable conditions are in an "insurability" section on the LTCI application. Group A offers a comprehensive, tax-qualified LTCI policy and requires full underwriting for retirees, parents and all classes of spouses.

To date, Group A has enrolled over 160,000 individuals into its risk pool and the average age of its risk pool is 62.3 years of age. Today there are over 2,800 approved claims with approximately $2 million in monthly claims payment. Yearly actuarial studies have shown that overall the risk pool's claims experience is consistently 55-60 percent of expected in the risk pool's pricing models.

**In this older age group the ratio of benefit payments to premium collected is approximately 60.2%**

**Higher Decline Rates than Expected.** There have been over 7,500 individuals 80 years of age and older that have applied for Group A's LTCI product. These individuals are fully underwritten using a comprehensive LTCI application, an attending physician statement and a face-to-face assessment of function and cognitive status. Over the years, approximately 39 percent of applicants in this age group have been accepted and 61 percent have been declined. Age-specific accept and decline rates are as follows:

**Table 1**

| Age | Accept | Decline |
|---|---|---|
| 80-84 | 44% | 56% |
| 85-89 | 29% | 71% |
| 90-94 | 19% | 81% |
| 95+ | 10% | 90% |

Currently, there are over 2,100 policies in force for those 80 years and older and collectively they represent over 110,000 covered months of exposure. A review of reasons for underwriting declination shows a high degree of adverse selection in older age groups. Many individuals age 80 years and older applied for LTCI with medical conditions that predispose them to an imminent disability, while others applied in the midst of a disabling event or at a point that they needed LTCI services to maintain their independence. It could be said that these individuals had a sense that they currently or would soon need services and that this was a motivation to apply for coverage. A careful analysis of those accepted into Group A's LTCI risk pool showed them to be fairly healthy with mild and very stable medical conditions and all were active and completely functional and independent at the time they were issued a LTCI policy. In fact, when we compared a small number of older applicants with arthritis, cardiovascular and pulmonary disease to a younger group of applicants with the same diseases we found their chronic medical conditions to be far less severe than younger applicants who had been accepted with similar conditions.

**Higher Claim Rates than Expected.** A review of claims data for those 80 years of age and older who were accepted into Group A's LTCI risk pool shows that 522 claims have been submitted and that 399 are in a paid status. The claim rate for those 80 years or older is 41.4 claims per 1000 life years exposed with an average duration of closed claims of 329.5 days. Approximately 24 percent of beneficiaries recovered or died during their elimination period and to date, 42 percent have recovered or died while receiving benefits. In this older age group the ratio of benefit payments to premium collected is approximately 60.2 percent and the top four claimed diagnoses include stroke, dementia, cancer and fractures with lasting disability. Age specific claims rates are as follows:

**Table 2**

| Age | Claims | Claim Rate/1000 Life Years Exposed |
|---|---|---|
| 80-84 | 354 | 39.5 |
| 85-89 | 138 | 98.7 |
| 90-94 | 26 | 120.6 |
| 95+ | 4 | 639.4 |

Further analysis showed that for those who claim, average months-to-claim becomes shorter as the age of the injured at entrance into the risk

pool increases (e.g., 37 months at age 80-84 years, 30 months at age 85-89 years, 27 months at age 90-94 years and 16 months at age 95 years and older). This seems to confirm a hypothesis that older applicants have less "functional reserve" and thus are prone to incur earlier claims than younger applicants. Finally the data shows a tendency for longer claims at older ages.

**Table 3**

| Age | Months to Claims | Claim Duration in Days |
|---|---|---|
| 80-84 | 354 | 536 |
| 85-89 | 138 | 698 |
| 90-94 | 26 | 599 |
| 95+ | 4 | 735 |

This finding is similar to the experience in that found in the Fraternal LTCI risk pool and is counter-intuitive to the fact that life expectancy decreases with increasing age.

## Actuarial Perspective

Actuaries need to address issuing these policies from a profitability and risk standpoint. Since insurance products are (hopefully) priced to be profitable, risk factors particular to this age group need to be monitored as the experience develops.

As mentioned, tight underwriting is performed on this age group. Without the presence of field underwriting, Table 1 illustrates how severe the decline rate becomes at the oldest ages. If field underwriting occurs, the underwriting acceptance rates will be higher. However, whether a decision is made at the field or underwriter level, it is questionable whether pursuing coverage at these ages is worthwhile. High decline rates do not help your marketing efforts. By offering coverage at these ages you give the perception that coverage is available. But in the end, if few applicants are actually accepted, your sales force may feel misled.

Finally, the combination of tight underwriting and low acceptance rates causes the cost of underwriting per insured to be very high. A significant investment is made in underwriting to accept less than half those applying. To recover this cost, it is imperative that insureds persist without going on claim (when waiver of premium would commence).

**Table 4**

| Assumption | Aggressive | Moderate | Conservative |
|---|---|---|---|
| Lapse | | | |
| Duration 1 | 10% | 5% | 3% |
| Duration 2 | 6% | 4% | 2% |
| Duration 3 | 4% | 3% | 1% |
| Duration 4 | +4% | 2% | 0% |
| % Female Issued | 60% | 70% | 100% |

Premiums and profitability are particularly sensitive to three risk factors in this age group: the lapse rate, the claims rate, and the gender distribution. We varied these assumptions to model aggressive, moderate, and conservative pricing levels as follows:

Without focusing on one particular level of claim frequency, each shift in claim frequency analyzed, from aggressive to moderate and from moderate to conservative, represents an approximate 10-percent increase in incurred claims. This shift is not too dramatic for this age group given the thin line between being functional and disabled. In addition, a significant portion of disabling events at the older ages is from fractures or falls, accidental events difficult or impossible to foresee in underwriting. Finally, you need to consider the overall size of the issue age group. If the decline rate is so high that only five people are issued in a given age band, you may not have the luxury of being only 10 percent off. In this case you are either right on or off by 20 percent%.

**Table 5**

| Pricing | Annual Premium * | Daily Premium | Percent of MDB |
|---|---|---|---|
| Aggressive | $3,800 | $10.40 | 8% |
| Moderate | $4,700 | $12.90 | 10% |
| Conservative | $6,200 | $17.00 | 13% |

**Assuming maximum daily benefit of $130, nursing facility plan only, and issue age 82.*

continued on page 12

These pricing levels resulted in the following aggregate premiums:

You should monitor how closely the daily premium approaches the maximum daily benefit. The closer it comes, the more you risk being selected against. This would then result in a higher claims rate or a higher decline rate, neither of which are desirable. A potential insured would only purchase a policy this expensive if they really think they will need it, presumably with the hope that they will go on waiver of premium and receive more benefits than they paid in premiums. (This is an opinion that isn't substantiated. Hopefully someone will respond at some point.)

**Table 6**
**Loss Ratio Changes**

| | Aggressive Pricing Moderate Experience | Moderate Pricing Conservative Experience | Aggressive Pricing Conservative Experience |
|---|---|---|---|
| Pricing | 61% | 62% | 61% |
| Only Lapse Varies | 63% | 64% | 66% |
| Only Claims Vary | 70% | 70% | 79% |
| Only Gender Varies | 64% | 71% | 72% |
| Experience | 76% | 81% | 100% |

As you would expect, if experience levels are at or better than what it was priced, each scenario is individually profitable. However, the danger is that the experience is worse than what was priced, particularly if experience is bad enough to lose money yet not bad enough to qualify for a rate increase under the forthcoming rate stability regulations.

Table 6 shows the effect on the loss ratio if a product is priced with one set of assumptions but experience is worse.

Although the number of issues over age 79 may not be a significant portion of the overall distribution of business, it should not be overlooked due to the severity of the potential losses. Experience must be monitored closely.

## Conclusion

At the extremes of older age, careful underwriting can greatly reduce anti-selection in a traditional sense. However, it also drives higher declination rates, though this can be mitigated somewhat by field underwriting techniques.

Interestingly, the experience presented here shows that the healthiest 80+ year-olds accepted in LTCI risk pools are more likely to live longer than most their age. Although they are "healthy" and independent at time of acceptance the impact of advanced age places them at a much greater lifetime risk of developing multiple age-related impairments that lead to frailty, dependency and ultimately the need for hands-on assistance (e.g., diminished reserves at the time of injury or illness). It appears that careful underwriting of this age group may mean that we are building cohorts of older insureds who present a significantly increased risk of incurring LTCI claims of long duration.

Further study is necessary to determine if underwriting criteria and assumptions need to be adjusted for the older age group to include comorbidities that may mitigate very long claims.

Finally, actuarial assumptions should be reviewed to ensure that pricing is consistent with underwriting expectations.

LTCI applicants age 80 years and older present a formidable underwriting and actuarial challenge. As an industry, we should work toward promoting the need and benefits of LTCI coverage to younger age groups and this should in turn promote an increased uptake of LTCI products at younger issue ages. In so doing, a greater proportion of people will already have coverage once they reach age 80 and initial underwriting and issue will be less necessary at these extreme ages. □

Stephen K. Holland, MD, is senior vice president and Medical Director, Long Term Care Group, Inc. in Natick, MA.

Patrick Snow is vice president and Medical director, Aid Association for Lutherans/Lutheran Brotherhood.

Janet Perrie is an actuary with Long Term Care Group, Inc.

by many payment systems. Beyond the resident's RUG classification, suppose the facility is aware of a combination of specific diagnoses which suggest that costs will greatly exceed the expected level for his/her RUG classification. And suppose the facility is small with no hope that there will be enough resident scenarios with lower-than-expected costs to offset this resident's above-average costs. Should the facility be required to establish a "case reserve" for this resident on its financial statements? If so, for what period of time? The remainder of the current rate year (on the basis that the facility could terminate its Medicaid participation) or for all future periods (using a going-concern assumption)?

Should we suggest appropriate minimum surplus requirements for continuing participation (certification) in capitated Medicare or Medicaid programs? How should these levels vary with size of the facility? Can we apply HORBC (health organization risk based capital) standards in these cases?

What role should state insurance departments play in enforcing these reserve/surplus standards? What role should accreditation organizations such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) play in these cases?

• Should we leave it to the accounting profession to identify the actuarial role as it considers appropriate financial reporting requirements under these payment systems?

The accounting profession has pioneered the need for actuarial review in other areas in the past. Is it reasonable to allow the AICPA to establish standards for providers operating under pricing systems and wait for those standards to define the actuary's role in managing care provider financial risk?

• Can we borrow the lessons learned to date from capitation and sub-capitation of acute health care in the managed care community?
Managed care and a wide variety of risk transfer schemes have been employed in the primary and acute health care arena for a longer time than is the case with the LTCI sector. Can any of the guidelines/standards designed to address these questions in that arena be applied to the LTCI counterparts?

I have only started to ponder these questions myself. I hope this discussion will encourage others to give this topic some consideration. □

James M. Robinson, FSA, MAAA, is senior scientist at University of Wisconsin at Madison. He can be reached at jim@chsra.wisc.edu.

# A Word from the Editor

by Bruce A. Stahl

One expects variety in a newsletter about an industry that is full of variety. This edition of the SOA LTC Section Newsletter offers just that. If you are interested in product development, consider the lead article; if you are interested in underwriting, consider the jointly authored article by an actuary and two medical professionals on managing risks at an extreme age; if you are interested in actuarial responsibilities, consider the industry update on the Academy practice note addressing the NAIC model regulation rate certification; and if you are interested in less traditional long-term care insurance, consider the article on the role actuaries have in them.

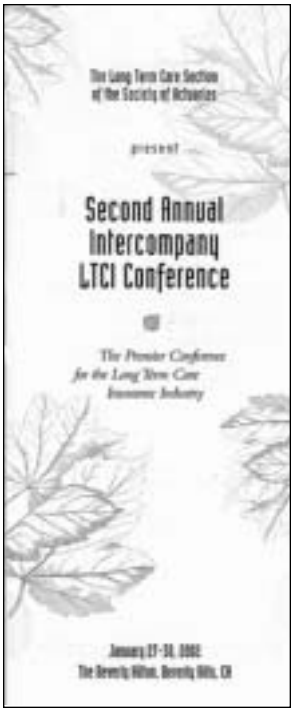
Variety also keeps us busy, and in order to assist with editorial duties, the LTC Section Council has asked Brad Linder of GeneralCologne Re to be the associate editor of the newsletter. He has already helped with ideas for future issues and with contacting potential authors. We look forward to his participation in this endeavor. □

Bruce A. Stahl, ASA, MAAA, is a chief actuary at Penn Treaty Network America in Gibbsboro, NJ. He can be reached at bstahl@penntreaty.com.

# Long-Term Care Insurance Industry Update

## LTCI Practice Note to Address 2000 NAIC Model Regulation

by Steve Sperka




This is a sample cover from the second annual Intercompany LTCI Conference that was held on January 27-30 at The Beverly Hilton in Beverly Hills, CA.

*Editor's Note: Steve Sperka's comments in the following article represent his own views as an individual member of the American Academy of Actuaries LTCI Work Group, not those of the Academy or the Academy's Work Group.*

The 2000 NAIC Long-Term Care Insurance (LTCI) Model Regulation has been a topic of discussion among LTCI actuaries because of the new responsibilities it places on the pricing actuary. The Model Regulation eliminates initial loss ratio standards in exchange for an actuarial certification covering several areas. Most significant to the pricing actuary because of the added responsibility it confers is the statement about premium sufficiency. Specifically, the actuary must make a statement that 'the initial premium rate schedule is sufficient to cover anticipated costs under moderately adverse experience and that the premium rate schedule is reasonably expected to be sustainable over the life of the policy form with no future premium rate increases anticipated.'

These new responsibilities placed on the LTCI pricing actuary by the Model Regulation prompted the formation of an American Academy of Actuaries work group. The work group's charge was to review the responsibilities that the Model Regulation places on the pricing actuary and to recommend actions and develop materials to enable actuaries to appropriately and responsibly discharge their duties. One product from the work group will be a practice note dealing with pricing LTCI policies that are subject to the 2000 NAIC Model Regulation.

The work group, chaired by Eric Stallard, consists of 12 members with a broad range of LTCI experience. In addition the group has received input from other pricing actuaries who have reviewed drafts of the practice note.

### A Practice Note Absent From Current Practice?

With the Model Regulation only recently being adopted in a handful of states, the work group was faced with a unique challenge. Whereas practice notes typically describe current actuarial practice on a given topic, little current practice exists on policies priced under the 2000 model. Instead, we hope the practice note will describe steps and issues that an actuary may consider when pricing LTCI policies under the 2000 model regulation. For example, when pricing initial premium rates that are subject to the 2000 Model Regulation, the practice note may discuss items that the actuary may want to consider when:

- Reviewing product design and management strategy for the product
- Setting initial premiums and assumptions
- Testing margins for moderately adverse experience
- Reviewing assumptions and implications of the actuarial certification with company management
- Preparing documentation of assumptions used.

In addition, the practice note may provide several hypothetical examples and Q&A to further aid the pricing actuary. The work group is drawing on the expertise of actuaries to provide a resource for other actuaries that are pricing policies subject to the 2000 Model Regulation.

### The Meaning of 'Moderately Adverse Experience'

One issue that the work group confronted early on was what to do about the meaning of the phrase 'moderately adverse experience.' Some pricing actuaries feel that further guidance on the meaning of the phrase would be useful when making an actuarial certification. Defining the term would be difficult, however, considering the limited experience available for LTCI. In addition, defining such terms would go beyond the scope of what a practice note covers. Consideration was also given to providing examples of margins for moderately adverse experience used by actuaries in current practice. Again, however, little current practice exists. Instead, we expect the practice note will identify factors that the pricing actuary may consider when determining the appropriate margins for 'moderately adverse experience.' Future revisions to the practice note may consider providing examples of "moderately adverse experience" once actuarial practices are established.

### Identifying Issues and Questions in the Model Regulation

The work group identified some issues where the Model Regulation was not clear and may need

further clarification. In these instances, the work group has made the NAIC aware of the potential confusion and has requested clarification of these issues. An example of one of these issues, which became a topic of discussion at a recent NAIC meeting, occurs with the actuarial certification made at the time of the rate increase. The Model Regulation is unclear whether the loss ratio requirements should be calculated on the basis of best estimate morbidity assumptions, or if the calculation should include margins for moderately adverse experience. The answer to this question would have implications on the actuary's ability to make a clean certification at the time of the initial filing. Following these discussions, the NAIC has provided clarifications on this point in the NAIC Guidance Manual for the Rating Aspects of the Long-Term Care Insurance Model Regulation. Specifically, the Guidance Manual states the loss ratio demonstration should include the actuary's margins for moderately adverse experience.

## Coming Soon

Recognizing the timeliness of a practice note, the work group is working diligently to make a draft available to LTCI pricing actuaries soon. A draft is available for comment now; this draft was the focus of an Interactive Forum and a Workshop at the SOA Spring Meeting in San Francisco, June 24-26. After the final version of the practice note is published later in 2002, periodic updates to the note may also be necessary as actuarial practice continues to emerge. The work group welcomes any comments or thoughts from actuaries about issues that they feel should be covered in the practice note. Comments can be sent to Eric Stallard at *eric@cds.duke.edu*. □

Steve P. Sperka, FSA, MAAA, is an associate actuary at Northwestern Mutual in Milwaukee, WI. He can be reached at stevesperka@northwesternmutual.com.

# LTCI Section Council Members Enjoy Their Time in New Orleans

Left to Right — Peggy Hauser, Anna Rappaport, Phil Barackman, Jim Glickman, Mike Abroe, Loida Abraham (2000-2001 Chairperson), Greg Gurlik (2001-2002 Chairperson), and Amy Pahl.

Loida Abraham, retiring Section Chairperson, receives a gift of the Section's appreciation from Greg Gurlik, incoming chairperson, at the Annual Meeting in New Orleans.

# New SOA Study Analyzes Demographic Experience of Continuing Care Retirement Community Residents

by Bill Breedlove

A study recently published by the Society of Actuaries provides financial and operational analyses of Continuing Care Retirement Communities and other senior congregate living arrangements.

The study, authored by Harold L. Barney, F.S.A., M.A.A.A. and Dave Bond, F.S.A., M.A.A.A., examined data from 72 facilities, developing actuarial decrement rates for mortality, morbidity and withdrawal patterns.

Several significant results were found in the study. For example, the observed actuarial decrement rates varied significantly from facility to facility. Such results may be indicative of differences in admission standards, although because the results were beyond the scope of the actual study, it has not been proven one way or another.

Another noteworthy result was that there were no statistically significant differences observed for the decrement rates between Extensive, Modified and Fee-for-Service resident contracts. As was expected, mortality and morbidity rates were consistently higher for rental contracts compared to other forms of resident contracts.

There were also some interesting comparisons between the mortality rates of CCRC residents with annuitant buyers. The findings in this area are still open to speculation with some reservations being expressed by the reviewer.

A more expected outcome was found in the significant differences in the voluntary withdrawal rates between the contract types. As would seem to be logical, rental contracts had the highest withdrawal rates, and Fee-for-Service contracts (with no health care guarantee) had higher withdrawal rates than the Extensive contract.

Lastly, the length-of-stay analysis illustrated there was a distinct correlation between both the resident contract type and the healthcare configuration of the facility, and the time spent in the health center (assisted and skilled care) during the resident's lifetime. Contrary to expectations, residents with contracts offering extensive healthcare guarantees spent less time in health centers that their counterparts with alternative contracts.

These preceding paragraphs just skim the surface of the results found in the study. For more information—or an electronic version of the tables that are presented in the report, please contact the Society of Actuaries. □

Bill Breedlove is the Communications Specialist at the Society office in Schaumburg, IL. He can be reached at wbreedlove@soa.org.

SOCIETY OF ACTUARIES

475 North Martingale Road • Suite 800
Schaumburg, Illinois 60173
Web: www.soa.org