ISSUE 43 DECEMBER 2016

Long-Term Care News

SOCIETY OF ACTUARIES
LONG TERM CARE INSURANCE SECTION

Update on Changes to US GAAP for Long-Term Care Insurance

By Jamala Murray Arland

Long-Term Care News

Issue Number 43 • DECEMBER 2016

Published three times a year by the Long Term Care Insurance Section of the Society of Actuaries.

This newsletter is free to section members. Current issues are available on the SOA website (www.soa.org).

To join the section, SOA members and non-members can locate a membership form on the Long Term Care Insurance Section Web page at http://soa.org/ltc/

Society of Actuaries
475 N. Martingale Road, Suite 600
Schaumburg, Ill 60173-2226
Phone: 847.706.3500 Fax: 847.706.3599

Chairperson's Corner

By Vince Bodnar

The recent 2016 SOA Annual Meeting & Exhibit marked the end of my second term as chairperson of the Long Term Care Insurance Section. It has been my pleasure to serve our profession in this role and to work with the section council, friends of the council and wonderful staff of the SOA over the past year.

We accomplished a great deal during the year that we should all be proud of. Our section:

- Developed—and contributed to—many educational sessions at several SOA and other industry conferences.
- Hosted four well attended and well-reviewed webcasts.
- Participated in a project to share information and best practices with our counterparts in France.
- Initiated a cognitive lapse survey that should be completed in the coming months.
- Published three issues of the *Long-Term Care News* section newsletter.
- Created content for a regulatory depository for the benefit of our members.

And a few council members and friends of the council monitored and reported the progress being made on key public policy initiatives during the year.

In addition, we accomplished two primary goals for the year and have formed the roots of additional work for the coming year. First, our regulatory outreach resulted in council presentations at high profile rate hearings during the year. These presentations were not advocacy pieces. Rather, they provided basic educational content intended for policyholders and others unfamiliar with LTC pricing principles. We found that once such information is presented in an understandable way, stakeholders could have informed and civil exchanges about the contentious issue of premium rate increases. Our outreach also revealed a desire for other educational sessions between the regulatory and industry actuarial communities. The section is currently developing and will produce several webcasts during the current year to meet this need. It is my hope that this will be an ongoing effort that will continue for many years.

We also accomplished our second primary goal, which was to summarize and widely disseminate the results of the most recent Think Tank meeting. Our report was published on our section's website and was the subject of at least four educational sessions during the year. One of those sessions was a conference call with the NAIC's Long-Term Care Innovation Subgroup, which received very positive feedback from several regulators and other interested party attendees. The Think Tank has now moved in to "Do Tank" mode, with task-oriented work streams that are currently being executed on a volunteer basis. I plan to stay involved with this work over the next year. It is my hope that key elements of these efforts will be accelerated via funding of critical consumer research that will validate and refine product concepts. I am confident that our work represents fuel for the LTC innovation fire and that we will soon see some of its concepts take shape. My only uncertainty at this point is whether they will be introduced by a current market leader or by an industry disrupter.

I am grateful for the honor to serve you over the past three years as a member of the section council. I wish our new chairperson, Rebecca Tipton, my best wishes for a successful year. Finally, I encourage all of my colleagues in the LTC industry to consider volunteering your time, ideas and energy to the section in some way if you are not currently doing so. ■

Vince Bodnar, ASA, MAAA, is chief actuary at LTCG. He can be reached at *vince.bodnar@ltcg.com*.

Editor's Corner

By Robert Eaton

In this edition of the *Long-Term Care News* we offer you a potpourri of perspectives from around the industry. This has been a tiresome election year for most of us, with serious ramifications for the insurance industry. This edition hopes to take a bit of the load off as we reach back to the human element of LTC insurance in Mike Bergerson's article "So What's The Good News?" Loretta Jacobs and Scott Przybylski also write about LTC Wellness, which is a personal matter for many of us and our policyholders.

Jamala Murray breaks into the critical topic of LTC GAAP accounting and how forthcoming changes to this accounting standard will impact LTC insurers. Nick Sheahon writes of "The Actuarial Opportunity in Long-Term Care Insurance." In his article, Nick examines the role of the actuary in the ever-changing world of LTCI.

Finally, we round out our edition with discussions of the technical aspects of the financial impact of nonforfeiture, by Missy Gordon and Courtney Williamson, and with Tom Riekse's coverage of actual sales of inflation protection.

In addition to the articles here, I recommend that you also look into some of these latest LTC points of interest:

- The **SOA's LTC Pricing Project** was published on November 4. This project analyzes the likelihood of insurers implementing rate increases on currently-sold policies. The analysis takes into account the growth of the historical volume of data, and the actual pricing assumptions used over the past 15 years. The report concludes by suggesting that due to many factors, actuarial and environmental, rate increases on LTC products sold today are less likely than on those sold in the past. Read the full report at *https://www.soa.org/Files/Sections/ltc-pricing-project.pdf*.
- The **Predictive Modeling Workshop** will be held again at the 2017 Intercompany Long-Term Care Insurance (ILTCI) conference. The ILTCI is just around the corner, and will have taken place by the time the next edition of the LTC News hits the shelves. While the conference is always well-attended by both actuaries and other LTC industry professionals, we draw your attention to the Predictive Modeling workshop. For an extra fee in addition to the conference fee, you will get the benefit of learning from industry-leading professionals about the methods, madness, and moxie of LTC predictive modeling. The workshop is a full-day event, held on-site on the Wednesday following the ILTCI. You can find out more at: *http://www.iltciconf.org/predictivemodeling*.

I hope this edition is uplifting and adds a little pep and perspective to your holiday season. We look forward to seeing you in the new year! ■

Robert Eaton, FSA, MAAA, is a consulting actuary at Milliman. He can be reached at Robert.eaton@milliman.com.

Up Front with the SOA Staff Fellow

By Joe Wurzburger

In It's that time of year again: Time to make New Year's resolutions. How often do we make resolutions with great intentions and then go off the rails less than a month later? I love the joke about opening a gym called "Resolutions"—it will have gym equipment for the first two weeks of January and then turn into a bar for the rest of the year.

They say that one way to improve your chances of sticking to your New Year's resolution is to let others know about it so that they can help to hold you accountable. So with that in mind, I'd like to share one of my resolutions in this article.

I resolve to be mindful of the personal side of long-term care insurance.

As actuaries, we tend to focus on the technical aspects of long-term care insurance. What rate increase is necessary for a given block of business? How do we price this particular policy provision? What assumptions should we use for cash flow testing? Is this change in active life reserves reasonable?

Meanwhile, real people with unimaginable challenges face difficult decisions regarding long-term care insurance. For some, their prior decision to purchase long-term care insurance rewarded them with life-altering benefits during times of need. I encourage you to read Mike Bergerson's article in this issue of *Long-Term Care News*, "So What's the Good News?" Mike shares several heartwarming stories that are sure to make you feel even better about the work you do each day working with long-term care insurance.

I am also occasionally reminded about how challenging this product can be for people faced with a purchasing decision. Recently, a coworker asked if she could forward an email to me that she had received from a friend. Her friend faced a decision to purchase long-term care insurance through an employer plan, and her options thoroughly confused her. Reading her email, it was easy to see why this would be. Should she get inflation protection? If so, should she get 3 percent for X years or a 3 percent guaranteed purchase option for the life of the policy? Should she get $100 per day benefit or $150 per day? Were the premiums reasonable for each of these options?

I did my best to help her navigate these questions—with the proper caveats that I know more about pricing and reserving for long-term care insurance policies than I do about choosing policy features to best meet one's specific needs; I am not, after all, a financial advisor. She seemed to appreciate the help, and I felt good being able to help her. For me, it also served as a reminder that we work with a complex product, one much more difficult for consumers to understand than for us, who work in this world daily.

How does a renewed consciousness about the personal nature of long-term care insurance play into a New Year's resolution? I don't expect it to change the quality of my work—I hold myself to a high standard and try to exhibit professionalism regardless of my awareness of the personal side of long-term care insurance. But I do believe it will help with my own perception of the work I do in general, and specifically everything being accomplished through the work of the Long Term Care Insurance Section. The section not only provides continuing education for those working in the long-term care insurance space. It also encourages and supports thought leadership, the kind of thought leadership that can help to improve the experiences of long-term care insurance consumers.

Take, for instance, the thought leadership displayed by the LTC Think Tank. As you may be aware, the Think Tank work has been broken into three platforms:

- Platform #1: Data Driven Decision Support
- Platform #2: Service Evolution and Expansion
- Platform #3: Paying for Care

Each of these platforms looks to enhance the consumer experience. Some of the ideas intend to reduce the need for care. Other ideas suggest creating products that are more easily understood and accessible. Still others strive to create new and more affordable ways to deliver care.

One common characteristic among all three platforms: They are mindful of the personal side of long-term care insurance.

So I encourage all of you to be more mindful this year about the personal side of long-term care insurance. Take pride in the work you do that enables such heartwarming stories as those that Mike shares in his article this issue. And consider it as you strive to shape the future landscape of long-term care insurance. This product exists to provide financial protection for people during times of great need. Let's keep those people in mind.

And with that, I'm heading off for a pint at Resolutions. ■

Joe Wurzburger, FSA, MAAA, is staff fellow, health, at the Society of Actuaries. He can be reached at *jwurzburger@soa.org.*

Improving LTC Claims Experience through Wellness Initiatives

By Loretta Jacobs and Scott Przybylski

For more than 30 years, employers and health insurers have touted the benefits of wellness initiatives in controlling health care claims costs. While the success of these programs is not always easy to track, few can argue that efforts to improve the health of employees and policyholders lack merit.

As the baby-boom generation ages, long-term care (LTC) health insurers are also starting to investigate whether promoting and sponsoring policyholder wellness initiatives is a good investment. According to data recently collected by Bankers Life, there is evidence that pre-claim wellness initiatives—such as disease screenings—can, in fact, be a good investment.

> …proving that investing today to try to keep people healthy will actually pay off later in the form of lower claims.

LTC PROVIDERS FEELING IMPACT OF AGING POLICYHOLDERS

Long-term care insurance is a relatively new product line, having only gained sales traction in the mid-1990s. LTC insurers are only now starting to see claims emerge under the policies they wrote in the 1990s and early 2000s and the emerging claims experience has been somewhat less favorable than expected. As a result, most LTC insurers are investing in claims management protocols and fraud detection analytics in an effort to reduce the severity of ongoing LTC claims. Some LTC insurers are also beginning to explore implementation of pre-claim policyholder wellness initiatives as a means to reduce future LTC insurance claims incidence rates.

Almost three in four individuals aged 65 years and older have multiple chronic conditions, and adults with multiple chronic conditions account for more than two-thirds of health care spending, according to a June 2012 article published in the *Journal of the American Medical Association*, "Designing Health Care for the Most Common Chronic Condition—Multimorbidity."[1]

Health screenings can often detect chronic medical conditions before quality of life is impacted. Early detection and following treatment protocols can result in better outcomes and lower the risk of serious complications.

When insureds are healthy, everyone benefits. LTC policyholders obviously benefit by staying healthy so they may live independently, while insurers benefit from better claims experience and improved profitability in the LTC line of business. If a significant portion of insureds take advantage of and benefit from wellness initiatives, the risk of premium rate increases in the LTC business may also be mitigated—a beneficial outcome for insurers and insureds alike.

THE CASE FOR POLICYHOLDER WELLNESS INITIATIVES

The main challenge with wellness initiatives is proving that they are financially viable; that is, proving that investing today to try to keep people healthy will actually pay off later in the form of lower claims. A recent study conducted by Bankers Life provides some empirical evidence that pre-claim wellness initiatives can, in fact, be financially viable.

The study compared claims experience—both incidence and severity—from 2011 to 2013, between a group of policyholders who received one or more vascular disease screenings provided by Life Line Screening (a leading U.S. mobile screening company) to those who either declined to be screened or were never offered the option to be screened.

Since the choice to be screened is completely voluntary and the time and cost (other than a modest discount from the retail screening price) spent on the screening is borne by the insured, Bankers Life believes the screened population is a reasonable proxy for customers who would participate in wellness initiatives if offered. The screening itself is one component of an overall wellness/claims prevention program.

Bankers Life has been offering its LTC customers discounted vascular disease screenings since the early 2000s and more than three percent of its LTC insureds have been screened. More than 80 percent of those screened were initially screened before 2011. While the screened population is a relatively small percentage of the total population, it is statistically credible with almost 16,000 identifiable insureds and more than 45,000 total insureds exposed during the 2011–2013 time period.

Key findings of the Bankers Life study include:

- Claims incidence rates for the screened population were approximately half the claims incidence rates for the non-screened.
- Partially offsetting the favorable incidence rate experience was unfavorable severity experience. That is, although claims were much less likely to occur for the screened group, the claims that did occur were longer, on average, than the claims for the non-screened population.
- Claim lengths were 18 percent longer for the screened group than non-screened, attributable to both the mix of claims by diagnosis as well as presumably underlying health differences in the claimants.
- The screened group had a higher percentage of dementia claims, which are typically longer on average in duration, and a lower percentage of fall/injury and cancer claims, which are typically shorter than average, than the non-screened group. Moreover, claims with comparable diagnoses were longer for the screened population than the non-screened population.
- As expected, the screened group incurred a smaller percentage of circulatory disease and stroke claims that the vascular screenings are designed to detect, implying the screenings did offer protective value to the customers.
- Overall claim costs (incidence times severity), ultimately the most important measurement in the study, for the screened group were two-thirds as high as those for the non-screened group.
- The incidence, severity and overall claim cost differentials were remarkably similar across a variety of demographic features thought to impact claims (age, gender, length of time insured, marital status, underwriting risk class, residence state), so that the screened group always appears to be healthier than the similar non-screened group.

Bankers Life believes the study results are an encouraging sign for the potential of wellness programs to become an effective means of improving overall LTC claims trends, and is currently exploring development of predictive models to identify insureds potentially at risk for incurring a claim in the next several years so that targeted wellness protocols can be offered to them. While these efforts are currently in the formative stage, Bankers Life is optimistic that it can make a positive difference in customers' lives by keeping them healthy while improving the profitability and viability of its LTC business. ■

Scott Przybylski is senior LTC operations analyst at Bankers Life. He may be reached at *s.przybylski@banklife.com.*

Loretta Jacobs, FSA, MAAA, is senior vice-president, Health Product Management at CNO Financial Group. She may be reached at either *l.jacobs@banklife.com* or *Loretta.jacobs@cnoinc.com.*

ENDNOTE

1 *http://jama.jamanetwork.com/article.aspx?articleid=1187936&resultClick=3*

Update on Changes to US GAAP for Long-Term Care Insurance

By Jamala Murray Arland

Over the last several years, the convergence of U.S. generally accepted accounting principles (GAAP) with International Financial Reporting Standards (IFRS) has been the subject of a lot of discussion. The Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) were engaged in a joint project to develop a common guidance that would address recognition, measurement, presentation and disclosure requirements for insurance contracts. However, the changes proposed by the FASB in the June 2013 exposure draft created many concerns, including:

- Slower premium and profit recognition, due to aligning premium recognition with the expected claim pattern. Long-term care insurance (LTCI) premiums are collected for many years with claim payments expected to occur later in the product's life. This change would have meant that premiums collected over the life of a LTCI contract would not be earned until closer to the end of the contract's expected life.

- U.S. insurers being at a disadvantage relative to their international peers because assumption changes would impact earnings immediately, while IFRS allowed changes to be recognized over time.

- The potential for earnings volatility, due to updating to a market discount rate each reporting period, which would not necessarily be tied to the actual portfolio of assets backing the liabilities.

After many years of deliberation and re-deliberation, in early 2014, the FASB voted to abandon the comprehensive changes to accounting for long-duration contracts, and instead focus on targeted improvements to existing US GAAP requirements. During the Aug. 31, 2016 board meeting, the FASB decided to issue proposed updates to the standards in late September or early October 2016. The Proposed Accounting Standards Update was exposed on Sept. 29, 2016 with the comment period ending on Dec. 15, 2016.

In this article, I will:

- Summarize the existing US GAAP requirements for long-duration contracts, impacting LTCI,

- Summarize some of the targeted improvements proposed to existing US GAAP requirements for long-duration contracts, impacting LTCI, and

- Discuss implications to LTCI of some of the targeted improvements proposed to existing US GAAP requirements for long-duration contracts.

CURRENT GAAP REQUIREMENTS

Currently, LTCI is governed by provisions for long-duration contracts under FASB ASC 944 (previously FAS 60), of US GAAP. The statement notes that "Premiums for long-duration contracts are recognized as revenue when due from policyholders. The present value of estimated future policy benefits to be paid to or on behalf of policyholders less the present value of estimated future net premiums to be collected from policyholders are accrued when premium revenue is recognized. Those estimates are based on assumptions—such as estimates of expected investment yields, mortality, morbidity, terminations, and expenses—applicable at the time the insurance contracts are made. Claim costs are recognized when insured events occur. Cost that vary with and are primarily related to the acquisition of insurance contracts are capitalized and charged to expense in proportion to premium revenue recognized."

More simply, active life reserves (ALR) are held to provide for the liability associated with expected future claims on policyholders that are not in claims status as of the valuation date. On a GAAP basis, the ALR assumptions are established and locked in at issue, based on best estimate assumptions at that time with a provision for adverse deviation (PAD). Under FAS 60, a net level premium method is used for determining reserves. The net premium ratio is defined at issue as the present value of benefits (and in some cases, maintenance expenses), divided by the present value of gross premiums. The net premium for each subsequence period is then defined as the net premium ratio multiplied by the gross premium.

Amortization of the deferred acquisition cost (DAC) is determined in a similar way to the calculation of the reserves. The DAC amortization ratio, or k factor, is defined as the present value of the deferrable expenses, divided by the present value of the gross premiums. The amount of amortization each period is defined as the k factor multiplied by the gross premiums in that period.

The ALR and DAC are subject to annual adequacy testing, using current best estimate assumptions. This is called Loss Recognition Testing (LRT) under FAS 60.

Disabled life reserves (DLR) are held to provide for the liability associated with open claims on policyholders that are disabled as of the valuation date. DLR are calculated using best estimate assumptions as of the date of claim.

OVERVIEW OF PROPOSED TARGETED IMPROVEMENTS TO EXISTING US GAAP REQUIREMENTS FOR LONG-DURATION CONTRACTS

The proposed changes would converge the treatment of FAS 60 and FAS 97 products. This change would require annual updates of all cash flow assumptions used in calculating reserves, on a best estimate basis, at the same time each year, or more frequently if experience indicates that assumptions should be revised sooner. Additionally, the net premium ratio would be revised (subject to a cap of 100 percent) using actual historical experience since issue and updated future cash flow assumptions. A cumulative catch up adjustment would impact earnings in the current period. In subsequent periods, the revised net premium ratio is used to accrue the liability for future policy benefits.

Annual assumption updates eliminate the need for LRT and premium deficiency testing. Additionally, no PAD would need to be included in the assumptions.

The proposed discount rate would be updated on a quarterly basis, based on a portfolio of high quality, fixed income investments, not necessarily tied to the actual portfolio of assets backing the liabilities. The impact of changes due to the discount rate would flow through other comprehensive income, which is treated differently than the change in other reserve assumptions.

Under the proposed standards, DAC would be amortized over the expected life of a book of contracts in proportion to the amount of insurance in force. No interest would be accrued to the DAC balance.

IMPLICATION TO LTCI OF PROPOSED TARGETED IMPROVEMENTS TO EXISTING US GAAP REQUIREMENTS FOR LONG-DURATION CONTRACTS

On the “transition date,” still to be determined, the proposed standards would apply to reserves retrospectively (with a cumulative catch-up adjustment to the opening balance of retained earnings). This could result in a significant change to ALR at the transition date and in the future, especially for LTCI carriers with large inforce books of business. For DAC, the guidance would be applied on the basis of the existing carry amounts on that date, adjusted for the removal of any related amounts in accumulated other comprehensive income, which means that although the amortization pattern of DAC could change in the future, a significant write down on the transition date may not be required.

Annual updates to the cash flows underlying LTCI reserves would better align reserve development with the most current view of future liabilities, and revising the net premium ratio would mitigate some of the associated volatility. However, the proposed basis for DAC amortization will be somewhat disconnected from the pattern of cash flows and profits.

Separately, the proposed change does address an issue facing LTCI carriers with significant old books of business, on which they have implemented premium rate increases. Under the current standards, insurers do not have a provision to set aside some of the additional premiums after an inforce premium rate increase in GAAP reserves. This is because the net premium ratio is locked at issue. A revised net premium ratio, reflecting actual experience and updated future cash flow projections, would allow for the recognition of rate increases in the GAAP reserves.

The potential for volatility due to updating the market discount rate each reporting period, which would not necessarily be tied to the actual portfolio of assets backing the liabilities, remains a concern with the proposed changes. With the prevailing low interest rate environment, this change has the potential to put additional upward pressure on reserve levels.

The proposed changes represent a significant paradigm shift for LTCI. In an industry already facing substantial of scrutiny from regulators, shareholders and policyholders, introducing more opportunities for volatility could be problematic. ■

Jamala Murray Arland, FSA, MAAA, is vice president & actuary, Long Term Care Inforce Management at Genworth Financial. She can be reached at *jamala.murray@genworth.com.*

REFERENCES

Minutes of the FASB Board Meetings, March 23, 2016

FASB Project Website: *http://www.fasb.org/jsp/FASB/FASBContent_C/ProjectUpdatePage&cid=1176164382639*

Proposed Accounting Standards Update, exposed Sept. 29, 2016: *http://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176168477111&acceptedDisclaimer=true*

Nonforfeiture Benefits and Long-Term Care Rate Increases: What is the Financial Impact on Insurers That Offer Nonforfeiture?

By Missy Gordon and Courtney Williamson

INTRODUCTION

In the world of long-term care (LTC) insurance, rate increases have become a fact of life. This is due in large part to LTC insurance being a relatively young product and to the pricing of policies issued in the earlier days of the LTC industry—priced too low in hindsight—when there was little experience to go on. Lower-than-expected lapse rates, lower-than-expected earnings rates, and higher-than-expected claim costs combined to create an unprofitable environment for these policies. As time has gone on, pricing has converged more fully with experience, but many insurers still hold large blocks of business priced in the earlier years. Some of these legacy polices have shown the need for very large rate increases over the years, but only a portion of those increases has been approved by regulators. Therein lies the challenge in preserving benefits for policyholders while also enabling insurers to remain financially stable so that they can pay future benefits.

Today, policyholders are given options to offset the cost of large rate increases. One option is to reduce the policy's benefits, for example, by shortening the benefit period or lengthening the elimination period. Another option is known as nonforfeiture (NF), in which the policyholder stops paying premium but receives a pool of benefits that is equal to what they have already paid in to the policy. If an insured purchases an NF option, then it can be exercised at any time. For others, a contingent NF option may be available at time of rate increase pursuant to regulation. However, such an option can only be exercised at the time of a rate increase, and eligibility can vary by jurisdiction, issue date, issue age, and size of the rate increase. This article focuses on the effects of NF when elected at the time of an increase, regardless of whether the NF option was purchased or is contingent, and is referred to simply as NF throughout.

If an NF benefit is not available, policyholders may choose to let their policy lapse rather than pay the increased premiums after a rate increase. Regulators do not favor this outcome. The December 2013 model bulletin issued by the National Association of Insurance Commissioners (NAIC) recommends that jurisdictions require NF benefits for more policyholders that would otherwise be ineligible for NF. More and more regulators ask companies to offer NF to all policyholders regardless of issue date, issue age, and/or rate increase amount eligibility criteria as a condition of approval for a rate increase. This provides some relief to policyholders, who get some benefit based on what they have paid in. Under NF, no policyholder lapses as a result of a rate increase because all receive at least some paid-up benefit.

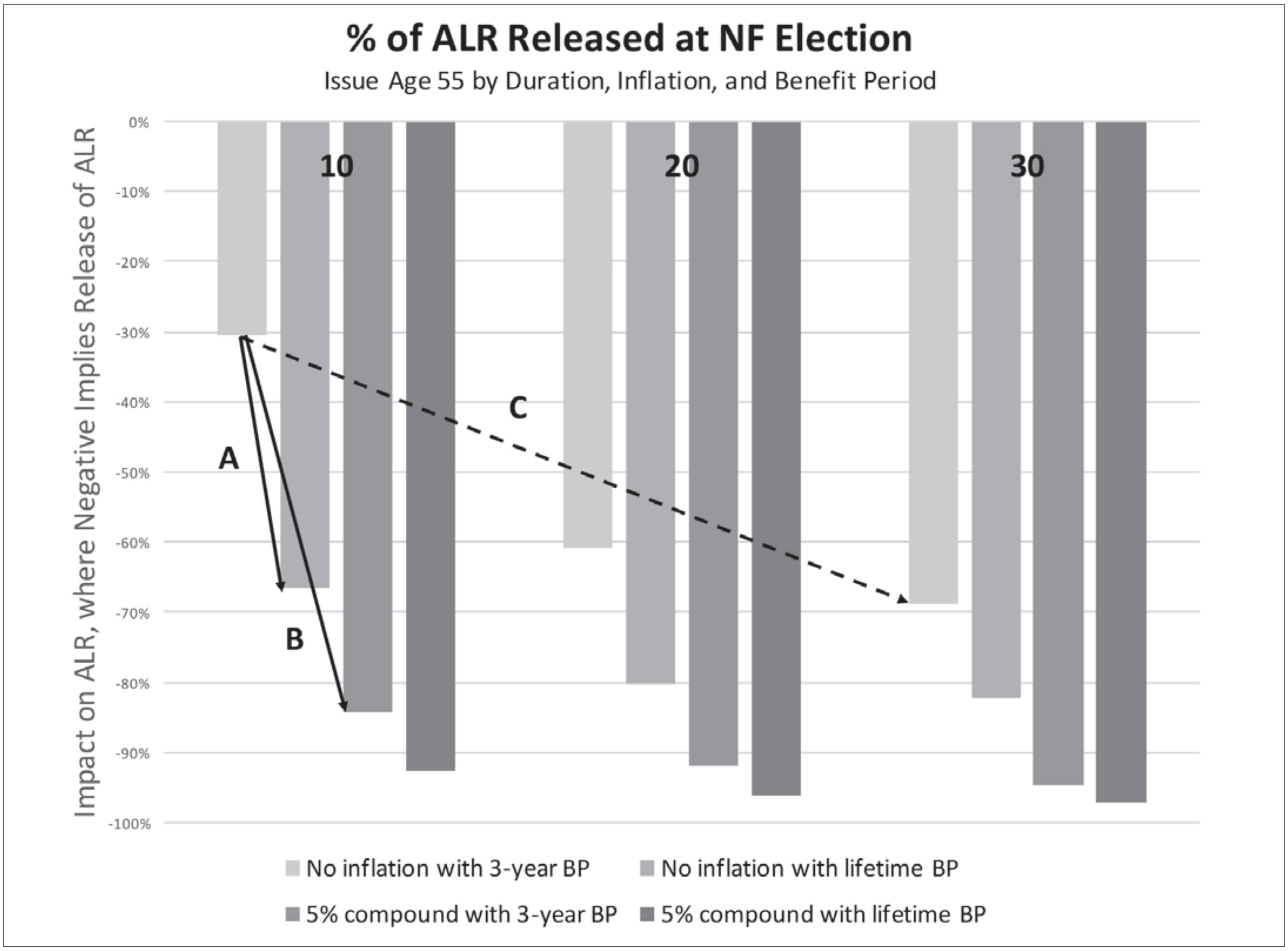
In this environment, it is important for insurers to understand the potential financial impact of offering NF benefits to more policyholders versus where only required by regulation. This article investigates that financial impact through an illustrative study. The purpose is to help insurers understand the impact of NF benefits on active life reserves (ALR) and the present value of future profit and to provide insight into whether it is, generally speaking, financially beneficial to offer NF voluntarily (or when requested by departments of insurance) as opposed to only when absolutely required to do so. These are only illustrative examples. Results will vary for a given company's situation as well as for different underlying assumptions. Additionally, there are varying opinions as to whether NF benefits are in the best interest of policyholders. It is not a one-size-fits-all solution. What may be good for some policyholders may not be for others.

THE IMPACT OF NF ON ALR

The first task at hand is to calculate the impact of NF on ALR, particularly with regard to how much ALR is released by NF elections. First, we calculate the ALR prior to NF election by taking the present value of future benefits and subtracting the present value of future net premiums. This gives us an estimate of "pre-NF" ALR. Then, we recalculate the ALR for the shortened benefit period after NF election.[1]

While some factors in this illustration decrease ALR as a result of NF election, two factors in this illustration inherently increase ALR. First, because the policy becomes a paid-up policy upon election of NF, the lapse rate drops to zero. Without NF, some policyholders would lapse over the remaining life of the policy, which would result in a relative decrease to the ALR. This does not happen with policies in an NF state. Additionally, the fact that the policy is paid up results in zero future net premium. Net premium is a reduction in the ALR calculation, but in this case, since there is none, ALR is increased (assuming all else equal). Other assumptions are unchanged from pre-NF to

FIGURE 1. IMPACT OF NF ON ALR FOR ISSUE AGE 55.



post-NF ALR (e.g., mortality and morbidity rates). Of course, releasing ALR at the time of NF election will increase profits to the insurer.

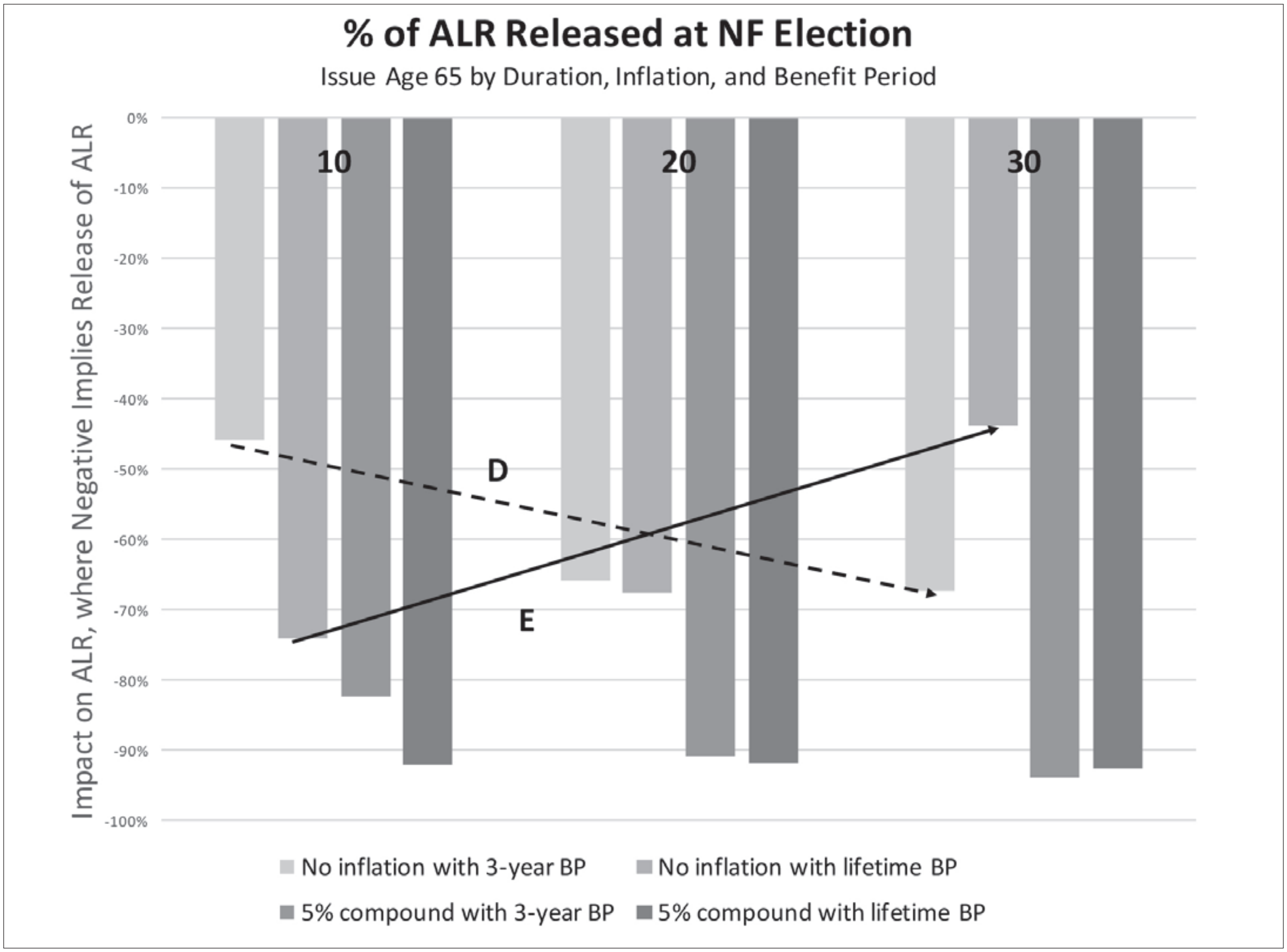
The following graph shows the percentage of change in ALR for a population with issue age 55. This is calculated by comparing the pre-NF ALR held just before NF election, based on the original benefit period, to the post-NF ALR amount held after NF election, using the shortened benefit period. The graph compares policies with inflation to no inflation, as well as three-year versus lifetime benefit period. Rate increases are shown occurring at 10, 20, and 30 years after issue.

The solid lines A and B show expected relationships. There is a significant reduction in ALR upon NF election for a lifetime benefit policy compared to a three-year benefit policy (line A). The lifetime benefit policy has a larger reduction to the shortened benefit period compared with the three-year benefit period, causing a larger decrease in ALR. The other expected relationship is the further drop in ALR for a policy with inflation protection compared with a no-inflation policy (line B).

The dotted line (line C), however, represents a less intuitive result that requires more explanation. This line indicates that the later the NF election occurs after issue, the larger the ALR reduction. This is counterintuitive because one might expect that if more premiums have been paid, a longer shortened benefit period would result, and thus less ALR release. The reason for this result, however, is that, as the block ages, the future projection period and the time between NF election and a claim are shorter.

For the example, a policy that has been in effect for 30 years covers a policyholder who is attained age 85 and could go on claim any day. A 10-year-old policy is covering a 65-year-old individu-

FIGURE 2. EFFECT OF NF ON ALR FOR ISSUE AGE 65.



al, who is likely to go 15 to 20 years without a claim. The shorter remaining coverage period for the policy inforce for 30 years reduces the impact on ALR from using a 0 percent lapse rate and $0 net premium compared with the policy 10 years post-issue. This means that there is a bigger relative reduction in the ALR due to the shortened benefit period for the 85-year-old.

The patterns in Figure 1, however, do not hold for all issue ages. Figure 2 shows similar information except for issue age 65.

Figure 2 shows that these relationships can change significantly based on issue age. The same unexpected relationship is again indicated by a dotted line (line D). The scenario for issue age 65 is different from issue age 55 in that there is less of a reduction in ALR over time for some benefit combinations. The pattern of smaller ALR reductions shown in line E is more consistent with what we may have originally expected. The smaller ALR reduction is caused, in part, by the fact that premiums are higher for older issue ages. When these higher premiums are paid for many years, the result is a shortened benefit period closer to their original benefit period and therefore less of a reduction in ALR. The premiums for an issue age 65 with no inflation with lifetime BP were high enough to outweigh the other impacts described above with Figure 1.

Another way to see the impact of higher net premiums resulting in less of a reduction in ALR is by comparing Figure 1 and Figure 2. Older issue ages have higher net premium, so the change in ALR due to using $0 net premium post-NF is generally larger and results in less of a reduction in ALR. In later durations this has a more substantial impact because the expected time between NF election and claim is shorter—meaning that the impact of survivorship and discounting is less with a shorter projection period. However, in early durations with leaner benefits (e.g., no inflation in durations 10 and/or 20) we observe the opposite in that younger issue ages have less of a reduction in ALR. This is caused by the 0 percent lapse, which has a larger impact for the younger issue ages because of the longer projection period, resulting in less of an ALR reduction. This outweighs the impact of $0 net premium, which is less for younger issue ages with leaner benefits because of the lower premium. The net effect can produce a larger reduction in ALR for younger issue ages.

THE FINANCIAL IMPACT OF OFFERING NF

Now that we've examined the effects of NF on ALR, let's turn our attention to the overall financial impacts of offering NF at various durations and levels of rate increase. The table below provides the present value of future profit (in thousands) for an insured that is assumed to (a) lapse the policy, (b) elect or receive an NF benefit, or (c) continue to pay premium. It also provides the future profit margin for the premium payers and whether or not it is clearly beneficial to voluntarily offer NF to all insureds. These values were determined by projecting future claims, expenses, and premiums.

In this illustration, when looked at on an individual basis, the "shock lapse" is always the most profitable situation. NF electors show a decreased present value of future profit (PVFP) compared with shock lapse, and those who continue to pay the new premiums represent a net loss. If NF is available to all (in other words, if there are no shock lapses) the overall effect will be a reduction to profitability.

The amount of profitability created by offering NF is driven by how much ALR is released. For cells where we expect more ALR to be released, we also expect NF offerings to be more profitable. The longer you wait to implement an increase, the more negative the PVFP margin becomes for policyholders who continue to pay premiums. Offering NF results in a higher percentage electing NF compared to those electing to shock lapse. This will result in some of the unprofitable premium payers being replaced by NF elections (based on the table below).

> Therein lies the challenge in preserving benefits for policyholders while also enabling insurers to remain financially stable so that they can pay future benefits.

If the premium payer is more profitable than the NF elector, then there is no financial benefit whatsoever to offering NF. However, if the NF election is more profitable than the premium payer, then it may be financially beneficial to offer NF—*if* the amount of additional non-premium payers (those electing NF) is high enough to offset the reduction in profit from replacing shock lapse with NF election. In order to determine if the to-be-determined (TBD) scenarios in Table 1 are financially beneficial in offering NF, we need to look at the number of insureds expected to elect NF (i.e., is the number greater than those that would be assumed to shock lapse). Let's examine this in the next table.

In Table 2, we assume adverse selection for policyholders that elect to continue to pay premiums to reflect additional claims, and also assume a "favorable selection" for those electing NF reflecting their better health (lower claims) than those keeping their full benefits. The question is whether it is financially beneficial to offer NF to all in these scenarios. Given that shock lapse is more profitable than NF election, in order for blanket offers of NF to be financially beneficial, more policyholders must choose to elect NF than would choose to lapse if NF was not offered. Put simply, replacing continuing premium payers with NF elections will increase profitability. If there is enough additional NF election (relative to those that would otherwise lapse), then it may be financially beneficial to offer NF to all.

Company experience suggests that this is the case, but is there a point at which voluntarily offering NF has a negative financial impact? According to our illustration, the answer is "no." In

TABLE 1. PRESENT VALUE OF FUTURE PROFIT IN THOUSANDS BY COHORT

Duration of Rate Increase	Shock Lapse (thousands in USD) (a)	NF Election (thousands in USD) (b)	Premium Payer (thousands in USD (profit margin)) (c)	Financial Benefit to Offer NF?
30% Increase				
10 years	15	12	-5 (-22%)	TBD
20 years	25	21	-7 (-63%)	TBD
30 years	19	17	-5 (-144%)	TBD
67% Increase				
10 years	15	12	0 (1%)	TBD
161% Increase				
10 years	15	12	14 (30%)	No

TABLE 2. FINANCIAL BENEFIT OF OFFERING NF

Duration of Rate Increase	Shock Lapse Rate	PV Future Profit Aggregate of Payer & Shock[1]	NF Election Rate Needed to be Budget Neutral[2]	PV Future Profit Aggregate of Payer & NF Election[3]	Financial Benefit to Offer NF?[4]
30% Increase					
10	1.0	-4.9	1.2	-4.9	Yes
20	1.0	-6.6	1.1	-6.6	Yes
30	1.0	-4.9	1.1	-4.9	Yes
67% Increase					
10	2.7	0.7	3.5	0.7	Yes

[1] Shock PVFP x Shock Lapse Rate + Payer PVFP x (1 – Shock Lapse Rate)

[2] Simplified calculation to determine how much NF election is needed to create positive profit. Calculation assumes no change in the adverse and anti-adverse selection; however, these values would change.

[3] NF PVFP x NF Election Rate + Payer PVFP x (1 – NF Election Rate)

[4] Yes, if the actual NF election rate is higher than the amount shown in this illustration that is needed to be budget-neutral. This is true based on actual experience of a couple companies.

fact, it appears to be more and more beneficial to voluntarily offer NF as the block ages. The increase to the future profit margin is greatest when an increase is assumed on an older block due to the large reductions in ALR (seen in the graphs above). At first it appears counterintuitive that there is no point at which offering NF on older blocks of business will be adverse. One might think that the reserve release might at some point not outweigh the (1) adverse selection, (2) lost future premiums, and (3) longer shortened benefit periods associated with older blocks.

In fact, however, the interactions among the various factors at play show that, at least for our illustration, there is no point at which blanket NF offers become financially detrimental.

- At 10 years compared with at 30 years, the benefit period is significantly shortened under NF due to the small amount of premium that has been paid in. This is offset by the net premium and lapse rates collapsing to zero.
- At the 30-year point, the shortened benefit period is much longer, but there is less impact on the ALR of the offsetting 0 percent lapse and $0 net premium, given the short remaining lifetime of the policies. This lesser impact of 0 percent lapse and no future premiums results in a larger reduction in ALR.
- Lower profits will be the result of blanket NF offers in cases where the premium increase would have put the block of business into a profitable state. If an increase still results in negative or breakeven future profits, then blanket NF offers produce higher profits.

These results are based on our illustration and will vary for a given company's situation as well as for different underlying assumptions.

CONCLUSIONS

This illustration shows that it may be financially beneficial to voluntarily offer NF to all policyholders, given the typical magnitude of rate increases being approved by regulators in today's environment. This is driven by the larger numbers of policyholders electing NF than would choose to shock lapse due to an increase where NF is not an option. Company experience supports this finding. The financial benefit of NF does not seem to disappear over time: The illustration does not find a point at which a block of business is "too old" for the financial benefit of NF to be realized. However, if the rate increase greatly improves the financial position of the block, then offering NF has a negative financial impact because it is preferable that policyholders pay the rate increase instead of electing NF. The benefit of offering NF disappears for extremely large rate increases with sizable future profits, but these can be exceedingly rare. While company experience will vary, and NF election may not be universally the best choice for all policyholders, these results suggest LTC insurers should at least consider that offering NF to all policyholders may be financially beneficial. This is especially true as most premium increases approved in today's regulatory environment will not be sufficient to put the business into an overly profitable state. ■

Missy Gordon, FSA, MAAA, is principal and consulting actuary at Milliman. She can be reached at *missy.gordon@milliman.com.*

Courtney Williamson is an assistant actuary at Milliman. She can be reached at *courtney.williamson@milliman.com*.

ENDNOTE

1 In practice, companies balance complexity with materiality (depends on the amount of business electing NF) and may use a simplified approach rather than recalculation.

The Actuarial Opportunity in Long-Term Care Insurance

By Nicholas M. Sheahon

We have all heard the rallying cry for years that the baby boomers (those born between 1946 and 1964) are aging and it is going to strain our economy. As the Medicare Hospital Insurance Fund and The Social Security Trust Fund face serious funding issues, the country has struggled to find a long term financing solution for our seniors. Long-term care insurance (LTCI) faces similar problems as the insured population continues to age and behave in ways no one could have predicted 20 years ago. LTCI faces the harsh reality that it needs to innovate or relegate. I believe that our aging population needs LTCI and developing LTC actuarial talent is a key.

Financing the growing health care needs of our senior population will prove challenging as the traditional options for LTCI have proved to be wanting. Traditional stand-alone long-term care insurance has many well-documented pitfalls and exists in a marketplace that is volatile and largely untrusted. For all those that have been around the industry for any significant amount of time, the reasons for the current state of the LTCI market are apparent, and the solutions are scarce. LTCI is an increasingly complex product that requires a great deal of actuarial and product expertise to understand, as well as a great deal of technical expertise to quantify and model. It takes a team of actuaries with varying talents to properly analyze and digest the complexities that the product presents. While this may seem daunting, it also provides an excellent forum for building strong student/teacher relationships and developing strong actuarial talent within the industry.

This past March there was a session at the Intercompany Long Term Care Insurance (ILTCI) conference in which the topic of discussion was developing LTC actuaries. Many interesting opinions were discussed, but the overwhelming theme of the session was that the industry needs to be thinking about and doing something to develop LTC actuaries. There are differing opinions on the preferred SOA learning track that aspiring LTC actuaries should follow. Currently, traditional LTCI is represented through the group and health track while LTC riders on life insurance contracts and combination products (meaning a product that combines life insurance with LTC insurance) are covered in the individual life and annuities track. This overlap is consistent with how LTCI is viewed in general as "Not quite health insurance, but not quite life insurance, either." While the learning track of preference was up for debate (and what topic isn't in a room full of actuaries?), the one thing the group agreed on was the necessity of LTC actuarial development occurring through actual experience.

When I started as an LTC actuary, I had the distinct privilege of benefiting from a strong student/teacher relationship with some very knowledgeable and experienced LTC actuaries. Among all the wisdom imparted on me, one bit has always stuck with me and I have repeated it many times: "If you can understand LTC insurance, you can understand any insurance." Now, I do not take that to mean any LTC actuary can jump right into any other product line and be an expert, and I certainly would not be qualified to offer opinions on universal life products or Medicare advantage bids. What it means is that if you are up to the actuarial challenge of fully understanding long-term care insurance, there would not be many other actuarial subject matter challenges you find more daunting.

The LTCI industry sits at a crossroads where learning from the past intersects with decision points about the future. We have a window of time in which a small community of actuaries need to start coming up with possible answers to the questions that are strangling the growth of the industry. This ranges from industry actuaries developing new products, to actuaries figuring out how to deal with the issues of existing products, and even government actuaries determining how to promote growth through stabilizing a volatile market. Even with all of the competing interests of a number of parties, one thing is clear: LTCI needs to survive and innovation is the name of the game.

The focus on innovation has been pushed to the forefront as LTCI products approach the precipice of the future. This should be incredibly exciting to young actuaries who are looking to make an impact with the need for LTCI becoming increasingly more evident. Opportunity is in abundance. Demand for talented and able LTC actuaries is present. Solutions are scarce and more needed than ever. The problems facing the industry, while not simple, are clear and are in desperate need of problem solvers. Never has there been a better time for actuaries to show their worth and make their mark. I know I look forward to the challenge and I hope others are willing to join. ■

Nicholas M. Sheahon, ASA, MAAA, is the LTC regulatory actuary for Inforce Management at Genworth Financial. He can be reached at *Nicholas.sheahon@genworth.com.*

Inflation Protection: Is it Art or Science?

By Tom Riekse Jr.

Deciding which inflation rider to add to a long-term care (LTC) insurance policy is an inexact science at best. If you overestimate the inflation rate, you'll end up with too much benefit and you can't do much with excess LTC coverage. On the other hand, not having enough coverage to pay the actual cost of LTC because inflation wasn't accounted for at the time a policy was purchased is also a problem.

We recently analyzed over 25,000 LTC insurance policies that our business has participated in since 2011 to identify trends in inflation coverage. We included individual, group and linked life/LTC plans from a variety of carriers. The following chart shows the percentage of policies by year that fell in to each of five inflation categories.

Here are a few observations about each of the categories in our analysis:

1. **GPO or no-inflation.** These are plans that include a guaranteed purchase option (GPO) that allows people to buy inflation periodically, such as every three years, at attained age rates. Some products don't offer this option and clients simply buy a big initial benefit instead. Many group offerings default to GPO and allow buyers to get in at a more affordable premium. As polices have become more expensive, we've seen a big increase in choosing a GPO. In addition, many popular linked life/LTC plans are purchased without automatic inflation protection included.
2. **Three percent compound automatic increase.** The automatic three percent compound rider has been the most popular inflation option for the last several years and represents almost half of the coverage purchased. There are a couple of reasons why three percent compound is so popular. First, it is easy to understand and tracks long-term historical inflation well—although, for the past decade, three percent has been greater than the average rate. Second, in many cases plans with a three percent rate meet the criteria for state partnership protection. An issue is cost—the rider is expensive compared to other options.
3. **Five percent compound automatic increase.** Despite the fact only a handful of people still purchase this coverage, carriers are still required to offer five percent compound inflation coverage by law. Until 2013, five percent compound was the most popular inflation coverage selected. However, five percent compound coverage in new products is priced so high that very few people now purchase it. Many people who originally bought five percent compound coverage have comfortably reduced their inflation percentage. The insurance industry is lobbying regulators to remove the mandatory five percent compound offer.
4. **Increasing premium products.** This inflation option represents almost 15 percent of the riders chosen in 2016. What constitutes increasing premium LTC products? These products increase the benefit pool and premium. One example of these products are step-rated products, such as those offered by Transamerica and Genworth. Step-rated products increase the premium and benefit each year. In some cases, consumers have the opportunity to stop and re-start the increase options. For example, if the benefit increase has outpaced the cost of care it might be wise to stop the premium increases. Another type of increasing premium product allows the underlying performance of the insurer's investments to be offset against the premiums. Examples of these policies include Northwestern Mutual issuing dividends and more recently John Hancock with its Performance LTC product. Increasing premium policies can give more control to the policyholder to adjust

LONG-TERM CARE INSURANCE INFLATION OPTION SELECTED AS A % OF TOTAL POLICIES

	2011	2012	2013	2014	2015	2016
No Inflation or GPO	2%	4%	8%	14%	16%	29%
3% Compound	25%	34%	43%	53%	45%	45%
5% Compound	52%	48%	30%	12%	4%	3%
Increasing Premium	0%	0%	0%	1%	10%	15%
All Others	29%	21%	23%	19%	30%	8%

Source: Selected policies issues through LTCI Partners to inflation trends. These policies are rapidly increasing in popularity and may represent the smartest purchase.

5. **All other options:** In doing our analysis, there have been well over 100 different types of inflation coverage options offered by carriers over the last five years! Examples of the other inflation choices include one percent, two percent, and four percent compound inflation; three or five percent inflation that compounds at a simple rate; inflation that is "capped" at some percentage of initial benefit, such as 2x; "tailored inflation" that starts out at five percent, moves to three percent, then stops at a certain age; automatic CPI coverage (which is no longer available) and other options.

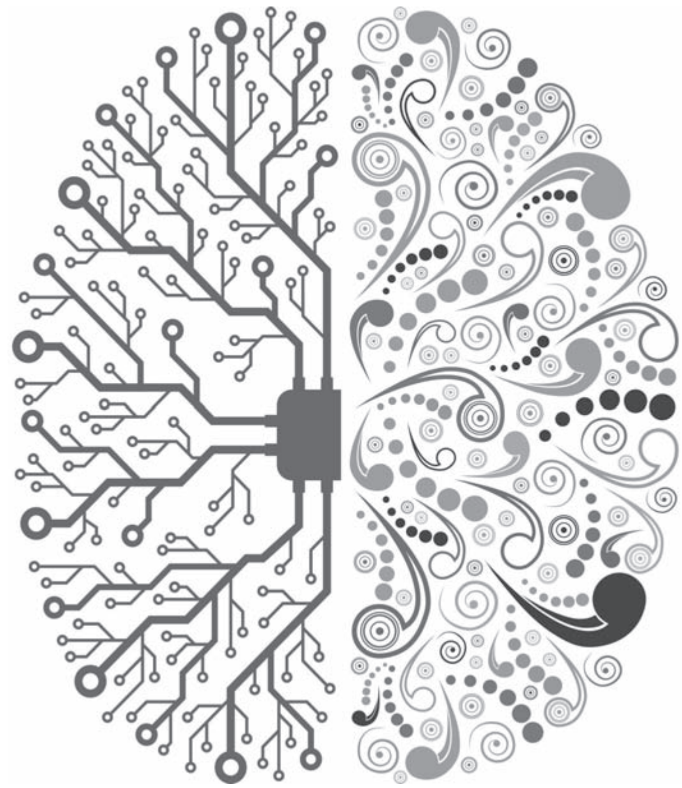
What are some conclusions from our findings and how can you help consumers make better decisions?

- Don't confuse the Health Care Inflation Rate with the cost of long-term care. Although some long-term care covered by policies is impacted by hospital and doctor charges, the majority of custodial care is a function of labor and real estate rates and those costs have been similar to overall CPI. The exception is nursing home rates, which have increased due to factors such as cost shifting in response to low Medicaid reimbursement. However, since more care is private pay at home or assisted living, advisors should design plans based on those costs.

- It's more critical than ever to periodically schedule an in-force policy review. Because of the greater flexibility of many inflation options, policyholders should not just buy their policy and forget about it. Instead, they should talk to their advisor periodically to make sure that the current plan is keeping up with the cost of care so that the right decisions can be made. Some companies are sending annual policy statements or providing better online policy information to make that easier.

- People are changing their inflation protection over the life of their policy. With all the in-force premium increases occurring, many carriers have created "landing-spots" to allow policyholders to adjust their inflation percentage. For example, a family might have started with five percent compound inflation on the policies they purchased several years ago. By adjusting their inflation coverage down to a 0.5 percent compound rate, they may be able to keep their premium the same even though their policy series has been through two rate increase cycles. They may be comfortable with that choice if their policy has more than kept up with cost of local care.

- Many state partnership plans require inflation protection. It varies by state, but many states have reduced their minimum inflation requirements.



- Innovation is good. Although choices are confusing, it is important to allow the best ideas to come to the marketplace. For example, if long-term care policies were standardized with a five percent compound inflation requirement, the impact on the market would be dire. Many seasoned insurance advisors are used to selling five percent compound plans and they need to learn about the new options.

- Focus on premium first. You can design long-term care plans to cover the most expensive care in the world and compound benefits at five percent, but the premiums will be unreasonable. Instead, consider a "good, better, best sales approach" so that people can select a policy that reflects their budget.

It's difficult to predict what the cost of care will be in the future. The only thing for certain is those without any plans will be the most negatively impacted. ■

Tom Riekse Jr., CEBS, ChFC, is managing principal at LTCI Partners, a brokerage general agency specializing in long-term care insurance. He can be reached at *tom.rieksejr@ltcipartners.com.*

So What's the Good News?

By Mike Bergerson

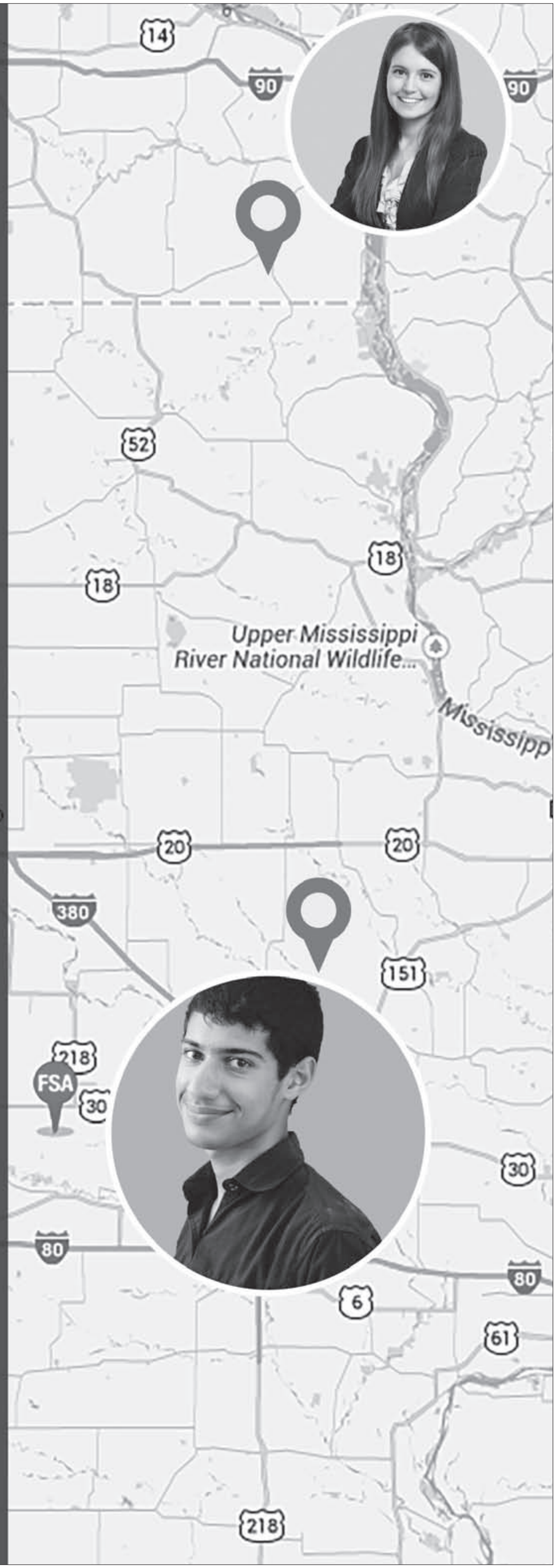
Oftentimes people try to include some good news when sharing bad news. I don't know if this helps to remove some of the sting from the bad news, and personally, I have not figured out if it is better to get the good news first or the bad news. With all of the bad news floating around the long-term care (LTC) industry over the last number of years, from stories about another rate increase request to those of questionable claim practices, it raises the question, "So what's the good news?" I was becoming discouraged that there was no good news with the current LTC products on the market and that the only source of any positivity was in looking to the future of the industry and possible innovations. Luckily, this has changed over the last year.

In the past year or so, several states have held public hearings regarding LTC insurance. These hearings gave consumers a chance to speak about their experiences. As might be expected, many consumers took the opportunity to voice their displeasure and frustration with a seemingly endless stream of rate increases on LTC policies. What was surprising to me, was a handful of consumers providing comments on positive experiences with their policies. Reading some of these stories reminded me that the current products in the industry are doing enormous good and I thought by sharing some of them I might brighten your day and make you feel the same way.

This story from Melanie tells her experience as a caretaker for her husband:[1]

> *I was able to have help come into our home to assist me with his care. Just one day a week, at first, and through the years we have increased to three days per week. If we had not purchased long-term care insurance and had the benefit so readily available and easily accessible, I fear my husband would have resisted having help come in, and I fear I also would have put it off much longer than was wise, thinking I could care for him myself.*

CONTINUED ON PAGE 22



Upper Mississippi River National Wildlife...
Mississipp

Today, nearly 5 years later, my husband is happily still living with me at home. We have a home health aide coming in 3 days a week. After some trial and error, we have found the perfect agency and person. I have three days a week to do as I please…running errands, taking care of myself, recharging, spending time with friends…or napping! Being a caregiver is HARD work. And my husband deserves the best I can give him. And thanks to our long-term care policy, I'm able to give him my best.

Long-term care insurance is a great thing. It is not for everyone. And I know policies have changed through the years. I do know, however, that I thank God every day that we purchased our policies.

This next story from Alice tells of her experience with LTC insurance relieving the stress from her husband's Alzheimer's:[2]

My husband and I purchased our long-term care policies when we were 65 years of age. At the age of 71, in 2001, he was diagnosed with Alzheimer's disease. I was his primary caregiver until his death in 2012. The stress of caregiving 24/7 is enormous. In 2007, I found an excellent day care facility that was a lifeline. The cost was considerable, but his long-term care policy lessened the burden. Form 2009 until his death in 2012, residential care was required. While the stress continued, the long-term care insurance was a tremendous benefit for which I am forever thankful.

Another story, from Gaynelle, shares her experiences as a caretaker for family members and offers a perspective not often heard (especially from a consumer that faced a 90 percent rate increase):[3]

After my mother's death in 1999, I told myself in relief, "I'll never have to do this kind of care again." In 2000, my youngest sister was diagnosed with Parkinson's disease at age 44. She had never married or had children. She had no long-term care insurance. When she became disabled in 2005 and could no longer work, I took her into my home, where she remains to this day. All of this happened while I was still employed full-time. So much for thinking I was out of the caregiving loop.

The result of these experiences was a wish that my children would not be burdened with similar caregiving issues. If they choose to help care for me should I need it, that will be fine. But, I do not want them to feel forced to make that decision because I have no other alternatives. Thus, my applying for a long-term care insurance policy.

I am now 68 years old and, to date, have thankfully had no need to file any claims. Isn't that what we hope for with any insurance? We carry it sometimes because the law requires it for our cars or our mortgaged homes. We carry it so it will help us should we ever need it (health insurance, long-term care insurance). All the while hoping we'll not ever really need it; but it's there just [in] case.

And finally, Elaine discusses more than just the financial benefits that LTC insurance can provide:[4]

I own and have received benefits of a long-term care insurance policy. I have a personal story that supports that this product is the simplest, most dependable way to cope with a care emergency. My husband suffered for 10 years with an early onset form of dementia. For 5 years of his illness, he lived in a residential facility. Our policy provided nearly $300,000 in benefits for his care. In the end, we were paying $12,000 a month for his care.

The policy gave us a financial leg up, of course. But [it] was also a critical emotional benefit. What a comfort to know we could get my husband the care he needed without hesitation. I didn't think twice when he needed residential care. I could relinquish very difficult tasks of his care and concentrate on caring about him rather than for him. By the time he moved to the facility, I was having chest pains and serious depression issues. That insurance was a life preserver for me.

I co-facilitate support groups for people whose loved ones have dementia. I encounter countless families who have no financial safety net. They suffer immeasurably. They worry about money, their health, their children, and watch helplessly as their resources drain away. Or they go it alone, without help, and experience serious health issues. They have no options and no hope, as if watching a loved one decline weren't bad enough. They ALL wish they could turn back the clock and buy long-term care insurance.

There is no question the industry is currently facing a lot of problems and has a long way to go to innovate for the future needs of our aging population, but I for one was glad to be reminded of some of the good that has come from our policies. ■

Mike Bergerson, FSA, MAAA, is principal and consulting actuary with Milliman. He can be reached at *mike.bergerson@milliman.com.*

ENDNOTES

1 Minnesota Department of Commerce (2015). Aug. 27, 2015 Public Hearing on Long Term Care Insurance, pp 5-6. Retrieved Sept. 13, 2016, from *http://mn.gov/commerce-stat/pdfs/pc-ltc-panel3-cnsmr-policyhldr-persp-cnsmrs.pdf.*

2 Minnesota Department of Commerce, ibid., p. 10.

3 Minnesota Department of Commerce, ibid., pp. 11-13.

4 Maryland Insurance Administration (2016). Public Hearing on Long-Term Care Insurance Rates: Written Testimony, p. 32. Retrieved Sept. 12, 2016, from *http://insurance.maryland.gov/Consumer/Documents/agencyhearings/Long-Term-Care-Written-Testimony-42816.pdf.*

SOCIETY OF ACTUARIES

475 N. Martingale Road, Suite 600
Schaumburg, Illinois 60173
p: 847.706.3500 f: 847.706.3599
w: www.soa.org