

## Key Points

- Increased magnitude and volume of rate increases have increased prevalence of reduced benefit options (RBOs) and focus on value of these RBOs.
- There is a wide range of approaches that can be used to assess the value of RBOs and the reasonableness of premiums for these RBOs.
- Viewpoints differ as to whether the relative value of RBOs should be evaluated based upon premiums and expected claims on a prospective-only basis or whether they should include a credit for premiums paid prior to a rate increase.
- Various considerations such as demographic mix, average duration, benefit mix, block experience differences, administrative complexities, and level of granularity can cause RBOs and premiums to vary by block/insurer.
- As a result, no single answer emerges on the determination of actuarial equivalence, and the focus is on a spectrum of reasonable value for these options.



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# Value of Reduced Benefit Options in Long-Term Care Insurance Rate Increases

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## Introduction

This issue brief examines the relationship of benefits to premiums for reduced benefit options (RBOs) in the context of ongoing premium rate increases for long-term care insurance (LTCI).

LTCI rate increases can result in significantly higher premiums than originally required. While rate increases are allowed for guaranteed renewable policies, the magnitude and volume of such increases raise concerns about consumer protection. An LTCI policyholder is generally able to reduce benefits at any time in a variety of ways and such RBOs are at the policyholder's discretion. However, when significant cumulative rate increases make LTCI coverage less affordable, such rate increases may limit the policyholder's viable options. Replacement coverage may be difficult or impossible to find and value can be lost if one replaces coverage with a different insurer (because premium rates increase rapidly with increasing issue age). These concerns lead to a discussion regarding what constitutes reasonable value for benefit reductions when a rate increase occurs.

Typically, at the time of a rate increase, insurers offer a suite of RBOs to policyholders from the slate of benefit options initially offered but priced at the increased premium rate levels. This could result in one policyholder, who paid higher premium rates for richer benefits for many years, reducing benefits and paying the same premiums as a policyholder who purchased the lower benefit from policy issue. To some this may seem inequitable, as the former policyholder paid premiums for a rich benefit they no longer have. To others, this may seem reasonable and equitable, because the policyholder was covered for a number of years at the higher benefit levels, and all policyholders are paying the same amount for the same future coverage. New benefit options offered by insurers for the first time at the time of a

rate increase can provide desirable alternatives to policyholders. However, the design and pricing of these options may be more complicated. LTCI stakeholders seek a way to define and ensure reasonable value for these varying situations.

This issue brief aims to articulate a framework through which regulators, insurers, and other interested parties may think about the relationship of benefits to premiums for insureds facing a premium rate increase, including those who accept a rate increase and those who do not.

### LTCI Background

The private Long-Term Care Insurance (LTCI) market generally began in the mid to late 1980's with products that primarily provided nursing facility coverage along with limited options for home and community-based care. The market grew substantially over the next 20+ years with products evolving to contain substantial benefits for home and community-based care, as well as options for unlimited benefit durations and inflation protection.

Insurers typically design LTCI products are typically designed with premiums that are based upon the issue age of the insured. The intention has been for premiums to remain level over the life of the policy. The level premium structure causes premiums in the initial years to be in excess of expected claims, with insurers holding a portion of premiums as reserves to pay for the higher expected claims in later policy years. The pricing of LTCI products is lapse-supported, meaning that the associated reserves from policies that terminate are intended to provide for the benefits and reserve increases of those policies that persist.

Insurers have sold most LTCI products have been sold on a guaranteed renewable (GR) basis, which means that the insurer must continue to renew the coverage as long as the premiums are paid by the insured. Insurers can increase premiums for GR products can be increased by the insurer, subject to applicable state insurance regulations, as long as the insurers make the same change to all policies with the same policy form issued to persons in the same class and state.

## Perspectives on Actuarial Equivalence

In the current actuarial literature, the primary mentions of actuarial equivalence pertain to determinations of medical benefits (for example, prescription drug schedules) being actuarially equivalent in that they are expected to pay the same actuarial present value (PV) of benefits in aggregate to a group of insureds.<sup>1</sup> The federal tax code defines

<sup>1</sup> [\*Actuarial Equivalence for Prescription Drug Plans and Medicare Advantage Prescription Drug Plans under the Medicare Drug Program\*](#); American Academy of Actuaries; March 2008.

Members of the Long-Term Care Reform Subcommittee's LTC Actuarial Equivalence Work Group, which authored this issue brief, include Greg Gurlik, MAAA, FSA, chairperson; Rhonda Ahrens, MAAA, FSA; P.J. Beltrami, MAAA, FSA; Andrew Dalton, MAAA, FSA; Robert Darnell, MAAA, ASA; Robert Eaton, MAAA, FSA; Seong-min Eom, MAAA, FSA; Peggy Hauser, MAAA, FSA; Perry Kupferman, MAAA, FSA; Tracy Maples, MAAA, ASA; Shawna Meyer, MAAA, FSA; Ray Nelson, MAAA, ASA; Bradley Rokosh, MAAA, ASA; Steven Smith, MAAA, FSA; and Adam Zimmerman, MAAA, ASA.

actuarial equivalence for pension plans as being “at a given time if the actuarial present value of the two amounts or benefits (calculated using the same actuarial assumptions) at that time is the same.”<sup>2</sup> Actuarial equivalence for LTCI rate increases and RBOs is unique from medical benefits and pensions plans, in so far as it focuses on both premiums and benefits whereas the latter focuses on benefits only. RBOs offer lower future benefits than the original plan in order to provide the policyholder with options to reduce premiums.

### History of LTCI Rate Increases

Generally, LTCI policy experience began to develop adversely to pricing assumptions in the mid-to-late 1990's. Some insurers began to file and implement rate increases on in force blocks of business. The drivers of these rate increases were low policy terminations, due to both voluntary lapse and mortality, high claims experience (morbidity), and lower investment yields.

During early premium rate increase implementations (in the 2000's), insurers frequently focused on two alternatives, accept the rate increase or lapse coverage, while also offering benefit reductions more informally. Unfortunately, for most insurers the premium shortfall deepened throughout the 2000's as lapse rates decreased further, mortality improved, and in many cases morbidity worsened. As insurers' financial positions on LTCI products deteriorated, insurers sought more premium rate increases which, in turn, created more decision points for policyholders. To mitigate these continued rate increases, policyholders were more broadly presented with alternative options to reduce benefits. In addition, insurers typically offered a backstop against total lapsation through a contingent benefit upon lapse.

As the need for LTCI rate increases accelerated in the 2000's, insurers, regulators and consumer representatives worked together to provide policyholders with additional options when facing premium increases. The National Association of Insurance Commissioners (NAIC) Long-Term Care Model Regulation was amended in 2006 to include Section 27 – Right to Reduce Coverage and Lower Premiums. This Section required all new policies to include a provision that policyholders could reduce coverage options at any time after policy issue. In 2014 this section was amended to require that all premium increase notices include an offer to reduce policy benefits and include a disclosure stating that all options available to the policyholder may not be of equal value.<sup>3</sup>

Although many insurers had made benefit reductions available to policyholders at any time, these new requirements made the practice universal on new business. To comply with these requirements, insurers allowed policyholders to decrease coverage from one benefit option to another existing benefit option and simply pay the filed premium for the lower level of benefits.

Furthermore, medical insurance is annually rated and is measured by one-year loss ratios, while LTCI premiums are expected to be level over the life of the contract and are measured by lifetime loss ratios. The lifetime loss ratio measurement for LTCI generates a longer time horizon over which actuarial equivalence can be evaluated. Therefore, LTCI RBOs require another way of evaluating equivalence that incorporates not only the different benefit streams, but also the different premium streams and potentially the existing reserves.

<sup>2</sup> Section 1.401(a)(4)-12 Definitions; Internal Revenue Code; 2010.

<sup>3</sup> NAIC Long-Term Care Insurance Model Regulation: [NAIC LTCI Model Regulation](#).

There are multiple ways to evaluate the actuarial equivalence of RBOs for LTCI. Actuarial equivalence can be regarded as more fully reflecting the level of premiums that a policyholder has paid over the lifetime of a policy considering changes in coverage and expectations for claim costs and persistency. Actuarial equivalence may also be considered based on the level of benefits and premiums paid going forward at the time the policyholder has the option to choose the RBO. The evaluations may involve looking at the differences in premium and benefit dollars paid, or the ratios of benefits to premiums. The remainder of this brief will discuss differing views.

## Reduced Benefit Options (RBOs)

Today, insurers generally present a wide range of RBOs to insureds that are receiving a premium increase. These RBOs typically allow the policyholders to mitigate some or all of the premium rate increase by: a) reducing benefits typically from those initially offered (examples include shorter benefit period, increased elimination period, and/or reduced daily/monthly maximum); b) reducing or removing optional riders such as inflation protection; or c) if eligible, accepting the Contingent Benefit Upon Lapse (no further premiums are due and total benefits are generally limited to the total premiums paid). In addition, some insurers have developed unique benefit options that were not available when the policies were originally sold, for example, the offer of coinsurance.

There is a wide range of viewpoints regarding the treatment of premiums for RBOs at the time of a rate increase. Table 1 outlines two options that generally represent the endpoints of this range of viewpoints, as well as two additional options in between these endpoints:

1. Current Rate Book Approach
2. Loss Ratio Neutral Approach
3. Cash Flow Neutral Approach
4. Credit for Change in Reserve Approach

Table 1 lists potential pros and cons of each concept and utilizes one common example, where an insured is offered the option of reducing their benefit to an existing benefit option that was available at the time of issue and had been purchased by other insureds. In this hypothetical example, it is assumed that the insured purchased a policy at issue age 60 with an unlimited/lifetime (LT) benefit period and 5% compounded inflation protection (IP) for \$2,000 per year. Fifteen years later, at the age of 75, the insured receives a notice that premiums are increasing by 50% (to \$3,000 per year). In addition to maintaining current coverage at the increased premium level, the insurer presents the insured with an alternative to reduce the maximum benefit period (BP) to five years (assuming a 50% rate increase for this plan as well from \$1,600 to \$2,400). Table 1 illustrates options for calculating the premium for this RBO.

**Table 1—Advantages and disadvantages of RBOs, and supporting calculations**

RBO Approach/Description	Pros	Cons																				
<p>1. <i>Current rate-book</i>—Premium for reduced benefit level based upon the original issue age and newly approved premium rates.</p> <p>Age 60 premium for the 5-year benefit period was increased from \$1,600 to \$2,400, so the insured would pay \$2,400.</p>	<p>1a—Generally accepted industry practice for benefit options readily available when product was sold.</p> <p>1b—Premium for RBO matches rate-book premium.</p> <p>1c—Prospective premiums equal for all insureds with the same issue age and same prospective benefits.</p> <p>1d—Administrative ease.</p>	<p>1e—Does not provide credit for any higher premiums paid for the original benefit.</p> <p>1f—RBOs may be limited or unavailable for a policyholder who is already at a minimum benefit offered.</p>																				
<p>2. <i>Loss Ratio Neutral Approach</i>—Calculates new premium (\$2,300) such that prospective projected loss ratio for RBO is equivalent to prospective projected loss ratio for original lifetime benefit with rate increased premium.</p> <table border="1"> <thead> <tr> <th></th> <th>LT w/ Inc and 5% IP</th> <th>5-Yr BP w/ Inc and 5% IP @ \$2,400</th> <th>@ \$2,300</th> </tr> </thead> <tbody> <tr> <td>PV Future Premium</td> <td>\$20,700</td> <td>\$16,700</td> <td>\$16,000</td> </tr> <tr> <td>PV Future Claims</td> <td>\$29,800</td> <td>\$23,000</td> <td>\$23,000</td> </tr> <tr> <td>Future Loss Ratio</td> <td>144%</td> <td>138%</td> <td>144%</td> </tr> </tbody> </table>		LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @ \$2,400	@ \$2,300	PV Future Premium	\$20,700	\$16,700	\$16,000	PV Future Claims	\$29,800	\$23,000	\$23,000	Future Loss Ratio	144%	138%	144%	<p>2a—Provides the same projected return on the future premium dollars for original benefit and RBO (as measured by Future Loss Ratio, i.e. PV of future expected claims divided by PV of future expected premiums).</p> <p>2b—Provides some credit for prior premiums paid.</p>	<p>2c—Complex calculation.</p> <p>2d—Rates would not match rate-book rate or be consistent among insureds with the same prospective benefit.</p> <p>2e—Likely creates administrative burden for insurers, especially if subsequent rate increases are needed.</p>				
	LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @ \$2,400	@ \$2,300																			
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	LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @ \$2,400	@ \$2,000																			
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	LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @ \$2,400	@ \$1,980																			
PV Future Premium	\$20,700	\$16,700	\$13,800																			
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Note: The numbers are illustrative, not comparative, and are used to show the mechanics of the calculations. The relationships of all of these numbers and approaches will vary based on issue age, policy duration, the magnitude of the rate increase needed, insurer assumptions, and other factors. In addition, insurers may do these calculations at a premium class level, as discussed later, rather than at an individual level.

## More on RBOs

- These benefit reduction possibilities are conceptual; they represent various approaches to determining premiums for the reduced benefit options. It may not be practical for insurers to consider all of these approaches, largely due to the variety of insurer historical and current practices. For instance, where regulations do not define “cohort” or “class”, insurers have determined how they define “cohort” or “class” at the time of pricing. This determination could reasonably vary by insurer, and therefore two insurers might apply the theoretical approaches differently. In addition, no two insurers will have the same costs, expenses, reserves, or modeling for the same benefits and therefore are unlikely to produce the same numerical result.
- If the insured also has inflation protection in their policy, for example benefits increasing at 5% per year compounded, the insurer might offer a reduced inflation percentage as an RBO. A change to the inflation percentage may be prospective only, allowing the insured to maintain his/her daily benefit at the current daily benefit level. Alternatively, some or all of the prior inflation increases could be eliminated. These alternative approaches can result in different future premiums.
- One approach to applying a reduced inflation percentage is to allow the insured to maintain the increased level of benefits, paying premiums at the issue age rates, i.e., the current rate book approach. If the insured reduced or eliminated the future inflation protection, the premiums would be based on the new rate book (which reflects the assumptions used in supporting the premium rate increase) and their original issue age, and with the current level of coverage. Note that depending on the relationship between premiums with and without inflation protection and the number of years since issue, the reduction in premiums could be relatively small (or even negative), in which case the change should not be offered. If the insured reduced the inflation percentage from 5% to 3%, for example, the insured might pay the issue age rates for the original level of coverage that would have increased to the current level of benefits at 3%. Again, this could lead to a reduction in premiums that is relatively small or negative depending on the relationship between premiums with 5% and 3% inflation and the number of years since issue. For these reasons, Approach 1 (current rate-book approach) may not make sense for inflation protection reductions.

## New RBOs With Rate Increases

Different criteria may be necessary for newly designed RBOs offered at the time of a rate increase versus RBOs that have been available all along. Whereas it may be challenging for insurers to calculate and charge premiums for existing RBOs that differ from the filed and approved premium rates, it might be possible for insurers to calculate premiums for newly developed RBOs using methodologies that go beyond the current rate book approach.

Two such examples of RBOs that were not originally available include:

1. Co-insurance—When the policyholder is responsible for a portion of the claim costs incurred so as to result in a premium payment that is identical or similar to the premium paid for the higher benefit prior to the increase. This offer typically includes a reduction in the maximum daily or monthly benefit. For example, a policyholder would pay 20% of actual expenses so that the insurer would reimburse only 80% of actual expenses up to a daily or monthly maximum that is 20% less than the current maximum.
2. Inflation Protection Percentage—When a policyholder with inflation protection is notified of a rate increase, a lower future inflation percentage might be offered that is intended to result in a premium payment that is similar to the premium paid for the higher benefit prior to the increase. If the lower future inflation percentage results in a premium that is identical to the premium prior to the rate increase, this is often referred to as a “Landing Spot.”

Consider if the lifetime policy in the previous example had an initial \$100 daily benefit with the 5% compounded inflation protection. Assume that through the built-in compound inflation protection, the \$100 daily benefit at issue age 60 has increased to \$200 at the time of the rate increase at attained age 75, and that the premiums were being increased from \$2,000 to \$3,000. Furthermore, the insured could have initially purchased the same policy without inflation protection for \$800, which would be increasing to \$1,200 with the rate increase. The insured would now like to consider reducing (or removing) the future inflation protection to maintain the premium at or near the original level. The right-hand column of Table 2 has been added to compare inflation RBOs (including true Landing Spot RBOs in approaches 2, 3, and 4) to the example from Table 1. Note the differences in the right-hand column are indicated in the column headings for each table.

**Table 2—Comparison of Benefit Period Reduction RBO and Inflation Percentage Reduction RBO (aka “Landing Spot”)**

RBO Approach/Description							
Benefit Period Reduction RBO (Unlimited Lifetime to 5-Year Benefit Period)				Inflation Percentage Reduction RBO (5% IP to the IP% indicated)*			
1. <i>Current Rate-Book</i> —The premium for the reduced benefit level based upon the original issue age and newly approved premium rates.							
Age 60 premium for the 5-year benefit period was increased from \$1,600 to \$2,400, so the insured would pay \$2,400.				Age 60 premium for the \$200 daily benefit without inflation protection would be \$1,200 x 2 = \$2,400.			
2. <i>Loss Ratio Neutral Approach</i> —Determine the reduced premium (\$2,300 for 5-year benefit period) or the reduced future inflation protection (to 1.0%) such that the prospective projected loss ratio for the RBO is equivalent to the prospective projected loss ratio with the rate increased premium and original benefits.							
	LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @\$2,400	5-Yr BP w/ Inc and 5% IP @\$2,300		LT w/ Inc and 5% IP	LT w/ Inc and 5% IP	LT w/ Inc and 1% IP
PV Future Premium	\$20,700	\$16,700	\$16,000	PV Future Premium	\$13,800	\$20,700	\$13,800
PV Future Claims	\$29,800	\$23,000	\$23,000	PV Future Claims	\$29,800	\$29,800	\$19,900
Future Loss Ratio	144%	138%	144%	Future Loss Ratio	216%	144%	144%
3. <i>Cash Flow Neutral Approach</i> —Determine the reduced premium (\$2,000 for 5-year benefit period) or the reduced future inflation protection (to 2.2%) such that prospective projected cash flow for the RBO is equivalent to the prospective projected cash flow with the rate increased premium and original benefits.							
	LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @\$2,400	5-Yr BP w/ Inc and 5% IP @\$2,000		LT w/ Inc and 5% IP	LT w/ Inc and 5% IP	LT w/ Inc and 2.2% IP
PV Future Premium	\$20,700	\$16,700	\$13,900	PV Future Premium	\$13,800	\$20,700	\$13,800
PV Future Claims	\$29,800	\$23,000	\$23,000	PV Future Claims	\$29,800	\$29,800	\$22,900
Future Cash Flows	\$(9,100)	\$(6,300)	\$(9,100)	Future Cash Flows	\$(16,000)	\$(9,100)	\$(9,100)
4. <i>Credit for Change in Reserve</i> —The new RBO premium rate (\$1,980 for 5-year- benefit period) or the reduced future inflation protection (to 2.6%) is based on the rate-book premium for the original issue age incorporating a credit for the difference in reserves between the new RBO and original benefit.							
	LT w/ Inc and 5% IP	5-Yr BP w/ Inc and 5% IP @\$2,400	5-Yr BP w/ Inc and 5% IP @\$1,980		LT w/ Inc and 5% IP	LT w/ Inc and 5% IP	LT w/ Inc and 2.6% IP
PV Future Premium	\$20,700	\$16,700	\$13,800	PV Future Premium	\$13,800	\$20,700	\$13,800
PV Future Claims	\$29,800	\$23,000	\$23,000	PV Future Claims	\$29,800	\$29,800	\$23,000
Reserve	\$15,700	\$12,800	\$12,800	Reserve	\$15,700	\$15,700	\$12,400**
Reserve Credit			\$2,900	Reserve Credit			\$3,300

\* Iterations are needed to determine the IP percentages or cash flow tables could be developed for different IP %'s and interpolation could be used

\*\* The iterative process will affect the reserve as the IP percentage changes

Note: The numbers are illustrative, not comparative, and are used to show the mechanics of the calculations. The relationships of all of these numbers and approaches will vary based on issue age, policy duration, the magnitude of the rate increase needed, insurer assumptions, and other factors. In addition, insurers may do these calculations at a premium class level, as discussed later, rather than at an individual level.

Another example of an emerging option is the cash buy-out option. A cash buy-out option results in the termination of the contract in exchange for a cash payment; there are no partial buy-outs that leave a contract in place. This type of option is unique to the circumstances of the offering and is beyond the scope of this brief. However, concepts in this issue brief can be useful in consideration of a range of reasonable approaches for determining a cash buy-out offer and any other applicable relationship to the rate increase decision.

## Other Considerations

There is a multitude of other considerations in determining actuarial equivalence.

- **Granularity of the calculations**—In theory, the actuarial equivalence calculations can be performed at an individual or an aggregate level. Because premiums can be changed on a class basis, one might consider the class basis to be an appropriate level for aggregation. However, there will be some trade-offs between how these groupings are defined and the homogeneity of individuals in those groups. For example, for a given premium class, it might be appropriate to consider the average age and average duration in the calculations. In addition, if the rate increase itself varies by issue age, a more granular calculation may be needed.
- **Administrative complexity**—Insurers would need to determine how to reflect the partial approval of a rate increase, phased-in increases, approval lags, and other non-uniform definitions and procedures between states. In addition, state regulators might prefer different versions of actuarial equivalence, or the current filing might need to build on the equivalence administered in a prior rate increase. Insurers will need to determine how to track experience and cash flows for different benefits or segments of business as policyholders move between those benefits or segments. Finally, if insurers consider offering a new option, it would need to build out the appropriate administrative protocols for the option.
- **Equity concerns**—The desire to offer some degree of actuarial equivalence might itself lead to equity of outcome concerns. If an RBO offered following a rate increase provides a lower premium rate than other policyholders are paying for the same benefit, some policyholders might consider this inequitable.

Furthermore, insurers might tailor a benefit reduction option only to one particular premium class—e.g., people with a rich inflation protection benefit. Policyholders receiving a premium rate increase, but without the same specialized benefit reduction offer, may feel that they have been treated inequitably.

Finally, although all people in the same premium class or cohort may be treated equitably at any point in time (at the time of a rate increase or otherwise), one should consider the treatment of policyholders within a class or cohort over time. People decreasing benefits at the time of a rate increase might be treated more favorably than people who decreased benefits previously (or potentially in the future).

- **Timeframes**—The focus of this issue brief is on insurers providing benefit reduction options at the time of a premium rate increase. However, one consideration could be to extend the window for any credits for a reasonable period after the rate increase, especially when the rate increase is substantive, in order to give insureds sufficient time to determine whether they can truly afford the increased premium. However, while this practice may be reasonable, it will likely further challenge administrative systems and capabilities.
- **Past Premiums**—There are multiple factors to consider if providing value/credit for premiums paid prior to a rate increase. Some examples include:
  - If based on reserves, there could be complexities in determining the appropriate reserve basis to use in the calculations, especially if reserves have been unlocked or strengthened. Any reserve contributed from the insurer’s surplus should not be considered in the determination of credit for past premiums paid as such reserves were not funded by past LTCI policyholder premiums.
  - The value or credit provided could be impacted by the potential for anti-selection in choosing RBOs which can be either a financial consideration or a health consideration for the policyholder.
  - Factors such as attained age and policy duration will change the value of various benefit options to the policyholder, so consideration of past premiums might have different impacts over time. This can result in different treatment than an individual policyholder has received in the past, which could prompt additional questions or administrative complexities.
  - Also note that due to the lapse-supported nature of the product, one RBO approach that offers more value than another approach could result in a rate increase that in aggregate may be higher to account for the additional value provided by the RBO offering.

## Summary

This issue brief outlines perspectives and considerations in determining what constitutes actuarial equivalence and reasonable value for RBOs when a rate increase occurs. Due to the variety of viewpoints and approaches, the complexities of those approaches, and other practical considerations, no single, clear answer emerges. The methodologies reviewed in Table 1 and Table 2 of this issue brief present a range of ways premiums and benefits are calculated that result in reasonable value for RBOs.

# Appendix

## LTCI Model Regulation Requirements

For a further and in-depth discussion of actuarial equivalence, certain provisions of the current LTCI Model Act<sup>4</sup> and LTCI Model Regulation<sup>5</sup> are relevant. Although these provisions have evolved over time, the models do not provide granularity on the topic of reasonable value.

Section 10, *Initial Filing Requirements*, of the LTCI Model Regulation was adopted in 2000 and specifies that an initial rate filing must include, “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 form with no future premium increases anticipated.”<sup>6</sup>

Section 19, *Loss Ratio*, of the regulation provides that, “Benefits under long-term care insurance policies shall be deemed reasonable in relation to premiums provided the expected loss ratio is at least sixty percent (60%), calculated in a manner which provides for adequate reserving of the long-term care insurance risk.” Subsequently, sections 20, *Premium Rate Schedule Increases*, and 20.1, *Premium Rate Schedule Increases for Policies Subject to Loss Ratio Limits Related to Original Filings*, eliminated loss ratio requirements at issue and added more specificity: “Premium rate schedule increases shall be calculated such that the sum of the accumulated value of incurred claims, without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum” of weighted loss ratios for the original premiums and higher loss ratios on increases in premiums. Thus, although there are specific requirements for loss ratios to be met, there is no definition of or requirement for actuarial equivalence in benefits after a rate increase.<sup>7</sup>

In addition, state lawmakers and regulators have enacted fairness/reasonableness in rating law. One example from Wisconsin indicates that, “Rates shall not be excessive, inadequate or unfairly discriminatory.”<sup>8</sup>

4 NAIC Long-Term Care Insurance Model Act: [MDL-640 \(naic.org\)](#).

5 NAIC Long-Term Care Insurance Model Regulation: [MDL-641 \(naic.org\)](#).

6 [MDL-641 \(naic.org\)](#); Section 10.

7 [MDL-641 \(naic.org\)](#); sections 19, 20, and 20.1.

8 Example from Wisconsin law at <https://docs.legis.wisconsin.gov/statutes/statutes/625.pdf>.

## LTCI Pricing Considerations

Actuaries typically price long-term care insurance policies on a level-premium basis. The level premiums are set to anticipate future policyholder behavior such as the expected number of claims, and the length and severity of those claims. Actuaries rely on experience that claims for long-term care benefits increase with aging.

When pricing LTCI policies, actuaries estimate mortality and voluntary lapse rates. These expected policy terminations are reflected in few policyholders being alive (or retaining their policies) at the oldest attained ages. The net effect of assuming these policyholder terminations, prior to making a long-term care claim, is part of a product's risk pooling: Policyholders who don't use the benefit end up paying premiums that support the claims of those who do use the benefit. Policyholder terminations, including voluntary lapses, are reasonable assumptions which are factored into decreasing the initial premium rates required to fund the projected claims.

Because of their level premium funding, many life insurance policies are required to provide nonforfeiture benefits through the standard nonforfeiture laws adopted by the states. These benefits are mandated in part because the likelihood of dying is certain even if the timing is uncertain. Term insurance products generally do not accumulate a cash value because death is not certain during the term period.

Despite their level premium funding, policyholders do not have this same certainty of incurring a claim in health insurance products, like long-term care insurance. The NAIC LTCI Model Act requires a nonforfeiture benefit to be offered, but it does not require a nonforfeiture benefit to be included in every policy.<sup>9</sup> In addition, the chosen structure for the nonforfeiture benefit was a simplified shortened benefit period generally equal to the sum of premiums paid.

<sup>9</sup> [MDL-640 \(naic.org\)](#); Section 8.

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