

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

Policy form 30240-MD is an individual policy form providing benefits to individuals for confinement in a nursing home. This policy form was issued in Maryland from October 15, 1989 to September 15, 1993.

1. Purpose of Filing

This Actuarial Memorandum has been prepared for the purpose of demonstrating the compliance of this premium rate increase filing with the applicable laws of the State of Maryland and with the rules of the Administration and that the anticipated loss ratio of this policy form meets the minimum requirements of the state. It may not be appropriate for other purposes.

2. Description of Benefits

This is an individually underwritten policy form which pays a daily benefit for confinement in a nursing home. The payments commence after an elimination period of 20 or 100 days depending on the plan chosen. No prior hospitalization is required.

After discharge from the nursing home, a post confinement benefit is also payable for up to as many days as nursing home benefits were received. The amount paid will be equal to the following percentage of the daily benefit paid on the last day of the insured's most recent nursing home stay: 70% for the first 30 days, 60% for the next 30 days and 50% for each day thereafter. The absolute maximum benefit period for both the nursing home benefit and the post confinement benefit is 2 years, 3 years, 4 years or unlimited (also referred to as "lifetime"), depending on the plan chosen at issue. Premiums which become due during a nursing home stay after benefits have been paid for at least 90 days beyond the elimination period are waived.

Benefit eligibility for nursing home coverage is based on the following: (a) sickness or injury; (b) 3 or more of the following 6 activities of daily living ("ADLs") deficiencies: Bathing, Dressing, Toileting, Continence, Transferring and Feeding; or (c) cognitive impairment.

At the time of issue, the insured could choose to elect No Benefit Increase Option, the Simple Benefit Increase Option or the Compound Benefit Increase Option. The Simple Benefit Increase Option increases the original daily benefit amount by a fixed amount (5% of the original daily benefit amount) each year starting with the second policy year and continuing through the policy anniversary following the insured's 85th birthday. The Compound Benefit Increase Option increases the previous year's daily benefit amount by 5% per year starting with the second policy year and continuing for the life of the policy. The increasing benefit option will apply even when the policy is in claim status. The Simple Benefit Increase Option is available in all states, whereas the Compound Benefit Increase Option is only available in some states, not including Maryland.

3. Renewability

This policy form is guaranteed renewable for life.

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

4. Applicability

This rate filing is applicable to inforce policies only, as this policy form is no longer being sold in the market. The rate increase will apply to the premium associated with the nursing home policy only. No rate increase is being requested for the premium associated with the optional home care rider.

5. Actuarial Assumptions

[REDACTED]

6. Marketing Method

This policy form was marketed by agents of RiverSource Life.

7. Underwriting Description

This policy form was fully underwritten with the use of various underwriting tools in addition to the application, which may have included medical records, an attending physician's statement, telephone interview and/or face-to-face assessment.

8. Premiums

Premiums are unisex and payable for life. Premium rates vary by issue age, the initial daily benefit amount, the benefit period, the elimination period and the Benefit Increase Option.

9. Issue Age Range

The issue ages were from 50 to 79, except for the benefit structure with 2-year benefit period, 100-day elimination period and No Benefit Increase Option which was issued to age 84.

10. Area Factors

Area factors are not used for this product.

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

11. Premium Modalization Rules

The following modal factors and nationwide percent distributions (based on inforce count as of December 31, 2018) are applied to the annual premium (“AP”):

Premium Mode	Modal Factors	Percent Distribution
Annual	1.0000*AP + 0.0	46.0%
Semi-Annual	0.5020*AP+ 0.4	10.2%
Quarterly	0.2580*AP+ 0.5	8.8%
Monthly	0.0868*AP+ 0.6	35.0%

12. Active Life Reserves

Active life reserves, although they have significant impact, have not been used in the analysis in this rate filing.

13. Trend Assumptions

As this is not medical insurance, explicit medical cost trends have not been included in the projections.

14. Past and Future Policy Experience

Nationwide experience for policy form 30240 is provided in Exhibit 6, including any previously implemented premium rate increases as described below in section 15. The experience in Exhibit 6 is provided separately for (i) policies with a lifetime benefit period and (ii) policies with non-lifetime benefit periods as well as for (iii) all policies in total.

Historical experience is shown by claim incurral year with the loss ratio for each calendar year. The following formula provides an illustration of the historical loss ratio calculation for each calendar year:

$$LR_j = \frac{\sum_k \sum_t {}_j Pmt_t^k * v^{t-k} + \sum_k ({}_j CR_{ValDate}^k + {}_j IBNR_{ValDate}^k) * v^{ValDate-k}}{EP_j}$$

LR_j = loss ratio for year j

${}_j Pmt_t^k$ = claim payments at time t for claims incurred at time k in year j

${}_j CR_{ValDate}^k$ = open claim reserve held on December 31, 2018 for claims incurred at time k in year j

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

${}_jIBNR_{ValDate}^k$ = incurred but not reported reserve as of December 31, 2018 attributable to claims incurred at time k in year j

EP_j = earned premium in year j

$ValDate$ = December 31, 2018

j = year of claim incurral

k = date of claim incurral

t = date of claim payment

$v = 1 / 1.045 = 0.956938$

A historical annual loss ratio is calculated, without and with interest, as historical incurred claims divided by historical earned premiums. Historical earned premiums in Exhibit 6 are calculated based on the issue and, if appropriate, termination date for each policy. Historical incurred claims in Exhibit 6 are determined by discounting claim payments and open claim reserves to the actual original loss date for each claim and by discounting IBNR to the time it is assumed to occur. These items are then summed to produce a total for each calendar year. For purposes of accumulating historical experience for a historical or for a lifetime loss ratio calculation, these calendar year totals are assumed to represent a mid-year value.

A future annual loss ratio is calculated, without and with interest, as anticipated incurred claims divided by anticipated earned premiums. Anticipated earned premiums and incurred claims are projected on a seriatim basis and then summed to produce a total for each calendar year. For purposes of discounting projected future experience for an anticipated or for a lifetime loss ratio calculation, these calendar year totals are assumed to represent a mid-year value.

A lifetime loss ratio as of December 31, 2018 is calculated as the sum of accumulated historical experience and discounted projected future experience where accumulation and discounting of the total for each calendar year occur at 4.5% and assume mid-year values.

15. History of Previous Premium Rate Revisions

Six prior premium rate increases have been received and filed and implemented on this policy form in Maryland. A 20% increase was received and filed in December 2004 and implemented on each policyholder's next policy anniversary beginning in March 2005. A 12.5% increase was received and filed in October 2006 and implemented on each policyholder's next policy anniversary beginning in May 2007. A 15% increase was received and filed in January 2008 and implemented on each policyholder's next policy anniversary beginning in May 2008. A 15% increase was received and filed in October 2010 and implemented on each policyholder's next policy anniversary beginning in January 2011. A 15% increase was received and filed in June 2013 and implemented on each policyholder's next policy anniversary beginning in September 2013. A 15%

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

increase was received and filed in November 2015 and implemented on each policyholder's next policy anniversary beginning in February 2016.

The actual and projected premiums in Exhibit 6 reflect the accumulated premium rate increases as received and filed in Maryland and implemented from 2005 through 2017 on a nationwide basis.

16. Requested Premium Rate Increase and Demonstration of Satisfaction of Loss Ratio Requirements

The company is requesting the following premium rate increases:

- a 15.0% premium rate increase for policies with a lifetime benefit period; and
- a 12.7% premium rate increase for policies with non-lifetime benefit periods.

[REDACTED]

The reason for the requested premium rate increases is due to a combination of actual lapse and mortality running less than expected in pricing and actual morbidity experience worse than expected for older attained ages. A premium rate increase is considered an effective way to reduce projected losses.

[REDACTED]

17. Maryland Average Annual Premium (Based on December 31, 2018 Inforce)

	Policies with a Lifetime Benefit Period	Policies with Non-Lifetime Benefit Periods
Before rate increase	\$1,717	\$1,220
After rate increase	\$1,974	\$1,374

These values assume all previously received and filed premium rate increases have been fully implemented on all policies.

18. Proposed Effective Date

The premium rate increase will apply to policies on their policy anniversary date following a 60-day notification period.

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

19. Nationwide Distribution of Business (Based on December 31, 2018 Inforce Count)

By Issue Age:

Issue Ages	Percent Distribution
<55	13.9%
55-59	33.3%
60-64	35.7%
65-69	14.6%
70-74	2.4%
75-79	0.1%
>79	<0.1%

By Elimination Period:

Elimination Period	Percent Distribution
20-day	31.8%
100-day	68.2%

By Benefit Period:

Benefit Period	Percent Distribution
2-Year	3.1%
3-Year	6.6%
4-Year	20.9%
Unlimited	69.4%

By Inflation Protection Option:

Inflation Option	Percent Distribution
None	35.8%
Simple to Age 85	62.6%
Compound for Life	1.6%

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

By Gender:

Gender	Percent Distribution
Female	68.7%
Male	31.3%

20. Number of Policyholders

As of December 31, 2018, the number of policies and annual premium inforce, assuming all premium rate increases previously received and filed in Maryland have been fully implemented on all policies in both the state and nationwide, is:

	Number of Insureds	Annual Premium
Maryland:		
Policies with a Lifetime Benefit Period	74	\$127,058
Policies with Non-Lifetime Benefit Periods	<u>42</u>	<u>51,236</u>
Total	116	\$178,294
Nationwide	8,246	\$11,716,571

RIVERSOURCE LIFE INSURANCE COMPANY

Address: 227 Ameriprise Financial Center, Minneapolis MN 55474

Actuarial Memorandum for Policy Form 30240 Series

October 2019

21. Actuarial Certification

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for preparing health rate filings and to render the actuarial opinion contained herein.

I believe this rate filing is in compliance with the applicable laws of the State of Maryland and with the rules of the Administration. This Actuarial Memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

I hereby certify that, to the best of my knowledge and judgment, this rate submission is in compliance with the applicable laws and regulations of the State of Maryland. Furthermore, the actuarial assumptions are appropriate. In my opinion, the rates are not excessive or unfairly discriminatory. This rate filing will progress toward premium adequacy but may not be sufficient to prevent future rate action. Therefore, benefits cannot be certified as reasonable in relation to premiums.



Anju Gupta-Lavey, FSA, MAAA
Director - Actuary
RiverSource Life Insurance Company
Date: October 4, 2019