NORTHWESTERN LONG TERM CARE INSURANCE COMPANY

ACTUARIAL MEMORANDUM

Product Name	Policy Form Number	Issue Date Range*
QuietCare RS	RS.LTC.(1101) & RS.LTC.(1007)	March 2002 – July 2008
QuietCare RS	RS.LTC.(0708)	July 2008 – October 2010
		(*see exhibit 2 for state's ranges)

CONTENTS

1. Scope & Purpose

This memorandum consists of materials which support the development of new premium rates for the policy series forms listed on page 1. The purpose of this memorandum is to demonstrate that the requirements of this State in regards to an in force rate increase request have been met. This rate filing is not intended to be used for any other purpose.

2. Requested Rate Increase

The company is requesting an average rate increase of 15% with the rate increase varying by benefit period. The requested rate increase for 3 year benefit period is 10%, 6 year benefit period is 15% and lifetime benefit period is 15%. Rates are not being increased for issue age 75+ policies with 3 year benefit period to ensure that inforce rates do not exceed new issue business rates. The rate increases adhere to the following restrictions:

a. We ensure that the proposed rate increase does not result in premium rates that exceed the rates for new business. This is demonstrated in the attached premium rate comparison.
b. We ensure that the resulting overall increase in rates satisfies the rate stability rule ensuring no less than an 85% loss ratio on the rate increase portion, while applying 58% to the current rate schedule. This is demonstrated in Exhibit 1.
c. The lifetime loss ratio after the proposed rate increase is greater than or equal to the lifetime loss ratio targeted in the original filing from this form.

New proposed rate tables for these policy forms are included with this filing. The contingent non-forfeiture paid up benefit equal to the sum of premiums paid is being offered to all policyowners impacted by the rate increase whether or not their increase is above the substantial increase triggers.

The number of policyowners and amount of inforce premium, as of December 31, 2015, for your state and nationwide, are displayed in Exhibit 2. The exhibit also shows the average annual premium before and after the proposed rate increase.

3. Reason for Rate Increase Request

A rate increase is necessary at this time due to significantly higher anticipated future and lifetime loss ratios. The higher loss ratios are mainly the result longer claim continuance with a greater effect on longer benefit periods, combined with lower lapse and mortality rates.

Northwestern Long Term Care Insurance Company (NLTC) has been evaluating this block and updating assumptions based on our experience as well as the LTCi industry experience. For the forms specified above, the projected lifetime loss ratio based on the assumptions outlined in this memo is worse than original pricing. The combined effect of changing the underlying claim costs and updating the mortality rates and persistency assumptions resulted in the need for a rate increase. The current premium levels are inadequate and, therefore, NLTC is requesting a rate increase in order to maintain the viability and financial stability of the policy form.

Even though we could justify a higher rate increase, at this time we have decided to request 15% taking into consideration the impact on our policyowners. If experience does not improve, we may need to request future rate increases on these policy forms.

4. Rate Increase History

We have not requested any previous rate increases on these policy forms, either in your state or on a nationwide basis.

5. Benefit Descriptions

This policy provides comprehensive long term care coverage, and reimburses eligible expenses of the insured up to the daily limits of the policy. The product is priced to have level premiums. All premiums are guaranteed renewable. If the policy becomes paid-up it becomes non-cancellable. The product is available at issue ages 18-79. Premiums are on a sex neutral basis.

The insured chooses a daily limit, benefit period, elimination period, and home and community care coverage percentage. The plan reimburses eligible expenses up to the daily limits once the elimination period is satisfied. The plan continues to reimburse expenses until eligible expenses are no longer incurred or benefits are exhausted.

Care can be provided by licensed health care practitioners in licensed nursing homes, alternate living facilities, the home, and adult day care agencies. Respite care is also covered.

Two indexing options are available. The first option, called the Automatic Benefit Increase option, is a level premium product with the daily limit and the Benefit Account Value remaining indexing at 3%, 4%, or 5% per year. The insured chooses the indexing percentage at issue.

The second option, called the Automatic Additional Purchase Benefit, provides a level benefit while the insured does not require LTC benefits. The daily limit and the Benefit Account Value remaining begin indexing at 5% per year if and when the insured is on claim. Also under this option, the insured has the option of purchasing an additional amount of coverage, equal to 5% of the prior year's daily limit, each year while not on claim. This additional coverage also increases the Benefit Account Value. The premiums for the additional coverage are level and are based on the insured's current attained age. The insured can continue to purchase the additional coverage under this option until the later of age 85 or the tenth policy anniversary, or until the insured has refused two of the optional increases in coverage.

All plans include the waiver of premium benefit.

An optional non-forfeiture benefit and survivorship benefit are also available. The non-forfeiture benefit, called Paid-up Nonforfeiture Benefit, provides paid-up coverage when premium payments stop on or after the third policy anniversary via a smaller Benefit Account Value. The survivorship benefit, called the Survivorship Benefit, is a benefit that can be purchased when two spouses each purchase an NLTC long-term care policy. This benefit will change the status of the second insured's policy to fully paid up, beginning at the later of the death of the first insured, and the first anniversary after the benefit on the surviving insured's policy has been paid for and in force for 7 years.

One underwriting class exists for all policies issued. The policy is participating.

6. Renewability

All policy forms listed above are guaranteed renewable.

7. Applicability

This filing is applicable to in force policies only, as this policy form is no longer being sold in your state or nationwide. The premium changes will apply to the base form as well as to all applicable additional benefits. The premium change will also apply to future purchase option elections under the Automatic Additional Purchase Benefit. The premium changes will not apply to policies which have already reached paid-up status.

The company remains in the market, and currently sells similar long-term care insurance.

8. Marketing Method

All policy forms listed above were marketed by Northwestern Mutual's (parent company of NLTC) career captive field force.

9. Issue Age Ranges

Issue ages are from 18 to 79.

10. Actuarial Assumptions – Updated

This section includes the current assumptions used to justify the premium rate increase.

A. Morbidity - Updated

Claim costs from Milliman's 2014 edition of the Long Term Care Guidelines were used for morbidity estimates. The Guidelines have been developed in conjunction with professionals in several Milliman offices and reflect actual experience of various carriers, numerous studies of non-insurance data and judgment. The guidelines are a continually evolving rating structure that are modified as more experience becomes available.

The 2014 Milliman Guidelines were tailored to reflect NLTC's underwriting standards and claims administration practices. Milliman develops morbidity selection factors for three levels of underwriting: looser underwriting, average underwriting, and stricter underwriting. Milliman determined after analyzing NLTC's underwriting standards and practices that we fall in the stricter underwriting category. Milliman also came in to look at our claims administration practices to adjust the 2014 Milliman Guidelines in order to be more in line with how we administer long-term care claims. Final adjustments were made to morbidity recognizing anticipated morbidity differences due to NLTC's specific product design.

We also reviewed how the 2014 Milliman Guidelines compare to our own limited amount of long-term care claims data and our cash claim payments are in line with the expected basis. Since the 2014 Guidelines provided by Milliman were based on long-term care policies with specific benefits equal to what these policy forms offer, our overall morbidity experience to-date, although limited and not credible, does not call into question the validity of the 2014 Milliman Guidelines for this block of business.

No morbidity improvement was assumed in pricing.

B. Expenses

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate. Normal renewal commission rates will be applied on any increase in premium.

C. Mortality - Updated

Our mortality assumptions were developed using internal company experience and include underwriting selection factors. Mortality improvement is also assumed through attained age 105.

In comparing the pricing mortality table used to the 1994 Group Annuitant Mortality (94 GAM) table used for valuation, the pricing ultimate rates are more conservative for the majority of issue ages. However, the biggest difference between the two tables is not the ultimate rates but that the pricing mortality recognizes lower mortality rates on recently underwritten business (mortality selection) and improved mortality over time (mortality improvement). Thus, the pricing mortality is more conservative than the table used for valuation (94 GAM) which does not have selection or improvement.

D. Voluntary Lapse Rates – Updated

Policy Year	%
1	3.400%
2	4.300%
3	3.200%
4	2.500%
5	2.000%
6	1.600%
7	1.300%
8	1.100%
9	0.500%
10+	0.500%

Lapse Adjustment by Issue Age: The following table of multipliers was used to adjust lapse rates for policies issued at older ages.

Updated Lapse Adjustment by Issue Age			
Policy Year	Issue Ages 18-69	Issue Ages 70-74	Issue Ages 75-79
1	100%	100%	90%
2	100%	100%	75%
3	100%	100%	60%
4	100%	100%	45%
5	100%	100%	30%
6	100%	100%	15%
7	100%	100%	0%
8	100%	100%	0%
9	100%	100%	0%
10	100%	80%	0%
11	100%	60%	0%
12	100%	40%	0%
13	100%	20%	0%
14+	100%	0%	0%

Lapse Adjustment for Paid-Up Nonforfeiture Benefit – These multipliers remain the same as those used for the original pricing.

E. Interest

Discounting and accumulating of earned premiums and incurred claims for the purpose of calculating historical, future anticipated and lifetime loss ratios was performed using the maximum valuation interest rate.

F. Distribution

Distribution of Business by Issue Age:

Issue Age	Expected Distribution	Actual Distribution
52	5%	45%
57	20%	26%
62	35%	18%
67	25%	8%
72	10%	2%
77	5%	1%

Average issue age = 54.7

Distribution of Business by Plan:

Benefit Period (Years)	Expected Distribution	Actual Distribution
3	10%	9%
6	25%	27%
Lifetime	65%	64%
Elimination Period (Weeks)	**Expected Distribution**	**Actual Distribution**
6	15%	6%
12	70%	86%
25	15%	8%
Home & Community Care %	**Expected Distribution**	**Actual Distribution**
100%	85%	84%
50%	15%	6%

Distribution of Business by Sex:

Sex	Expected Distribution	Actual Distribution
Male	40%	47%
Female	60%	53%

Distribution of Business by Indexing Option:

Indexing Option	Expected Distribution	Actual Distribution
None	25%	16%
Automatic Benefit Increase	5%	16%
Automatic Additional Purchase Benefit	70%	68%

11. Actuarial Assumptions - Original

The initial premium rate schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed. The original pricing assumptions for morbidity, voluntary termination rates, and mortality were as follows:

A. Morbidity - Original

The Milliman & Robertson (M&R) Internal Guidelines for Long Term Care Claim Costs were used for morbidity estimates. These Guidelines were developed in conjunction with professionals in several M&R offices during the mid-1990s and reflect actual experience of various carriers at that time, numerous studies of non-insurance data and actuarial judgment. The guidelines were established with a continually evolving rating structure that allow for modifications over time as more experience becomes available.

Underwriting adjustments were applied by policy year to reflect the morbidity anticipated due to underwriting. These factors were based on experience reviewed by M&R for benefit plans similar to NLTC with modifications to reflect the level of underwriting. For the Automatic Additional Purchase Benefit option, composite selection factors were calculated from the factors above recognizing that initial underwriting will wear off over time. Final adjustments were made to morbidity recognizing anticipated morbidity differences due to NLTC specific underwriting and product design.

B. Mortality - Original

1983 Individual Annuitant Mortality

C. Lapse - Original

Policy Year	Lapse Rate
1	4.00%
2	3.60%
3	3.30%
4	3.05%
5	2.90%
6	2.80%
7	2.70%
8	2.60%
9	2.55%
10+	2.50%

Lapse Adjustment for Paid-Up Nonforfeiture Benefit - The following table of multipliers was used to adjust lapse rates for those polices with the Paid-Up Nonforfeiture Benefit (NFB) option:

Policy Year	Lapse Adjustment Multiplier for NFB
1	50%
2	0%
3	200%
4	170%
5+	110%

12. Underwriting

Medical underwriting was required for individual policies issued under this policy form and varied by issue age. LTC underwriting takes into account conditions or combinations of medical conditions that are likely to result in an impending need for services. There was one standard underwriting class for these policy forms.

13. Premium Classes

Premiums are unisex and payable for life, except if the policy becomes paid up as described in Section 5 above. The premiums may vary according to one or more of the following policy and policyholder attributes: issue age, benefit level, benefit period, elimination period, inflation option, premium mode, home and community care coverage percentage, marital status, and additional benefits.

A multi-life discount of 5% is also applied where policies were marketed to three or more lives of an employer/employee group or ten or more lives of an association group. The discount was available to members and retirees of these groups, as well as their parents, spouses, and spouses' parents.

14. Reserve Basis

A. Base Plans

Statutory Reserve Basis - Statutory Active Life Reserves are based on the claim costs developed for this plan increased by 20-25%, varying by issue age. A one-year preliminary term method with 1994 Group Annuitant Mortality (94 GAM) and 4.0% or 4.5% interest is used, based on year of issue. Lapse rates are included in the reserve calculations. Specifically, the following formula for total termination rates (TTRs) is used:

TTR = Lessor of:
- a) 1994 GAM plus lessor of:
  - i) 8% for durations 1-4
4% for duration 5 and later; or
  - ii) 80% of pricing lapse rate;

  And

- b) 80% of pricing total termination rate.

Disabled life reserves use the claim costs developed for this plan and the maximum statutory valuation interest rate by calendar year of claim onset.

B. Paid-Up Nonforfeiture Benefit

Paid-Up Nonforfeiture Benefit Reserves use the same assumptions as the base plan except where noted below. Active life reserves are equal to:

a. The greater of:
   1. The LTC active life reserve, and
   2. The lapse benefit

plus

b. The Paid-Up Nonforfeiture Benefit Reserve

where:

The LTC active life reserve is consistent with the base policy.

The lapse benefit is equal to the present value of future claims for an insured if the policy is lapsed in the following year.

The Paid-Up Nonforfeiture Benefit Reserve is equal to the present value of future claims for all insureds currently in paid-up status.

Actuarial Certification

I, Gregory Gurlik, am Actuary and an officer of the Northwestern Long Term Care Insurance Company and am a member in good standing of the American Academy of Actuaries. I wrote the Actuarial Memorandum for the rate increase filing for forms RS.LTC.(1101), RS.LTC.(1007), and RS.LTC.(0708). The assumptions used as stated in this memorandum are reasonable and realistic for this product. To the best of my knowledge and judgment, this filing complies with the laws and regulations of your state and the benefits are reasonable in relation to the premiums charged.

Gregory Gurlik

Actuary

December 8, 2016

Date