



Medi(long-term)care for All:

A Look into the Future of Long-Term Care Insurance—Part Two

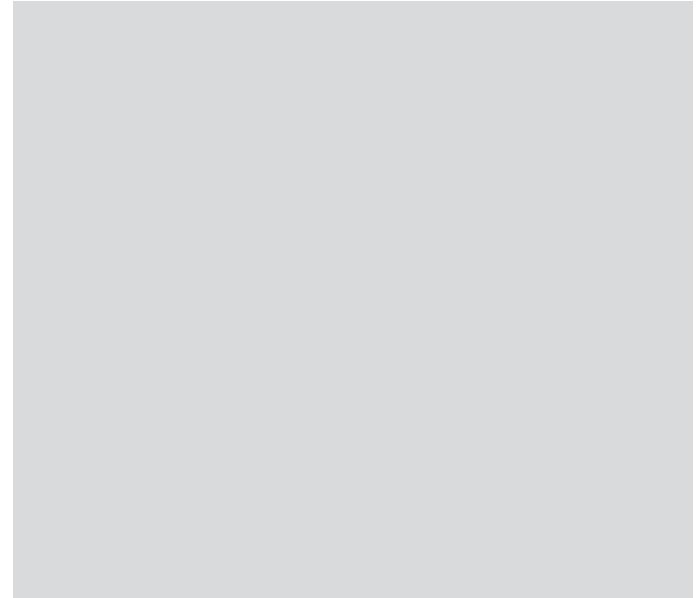
By **Stephanie Moench and Shawn Stender**

In part one of this two part series, we dove into the question of how the funding for long-term care (LTC) benefits may change in the future given the increasing LTC needs of the baby-boom generation and the recent attention that has been given to affordable LTC services. We outlined three possible future paths for LTC insurance funding and the associated implications for the private LTC industry. These paths included the following:

Scenario #1: Status quo—There are no substantial changes in how LTC services are funded. That is, LTC benefits for those not eligible for Medicaid continue to be primarily self-funded or covered via private insurance. While we assume that no federal social insurance programs are introduced to cover LTC services in this scenario, additional jurisdictions may implement their own social LTC programs, similar to what was enacted by Washington state in May 2019.¹

Scenario #2: “Medicare for All”/“single-payer” system—The way LTC services are funded changes dramatically. This could involve the United States adopting a federal social insurance program that provides materially complete LTC coverage, similar to the programs introduced in countries like Denmark and France.^{2,3} This potential future represents the alternative “end-point” to the status quo scenario.

Scenario #3: Somewhere in between—Funding for LTC services may fall somewhere between scenarios #1 and #2. The United States may not be prepared to transition to a “complete” social LTC program; however, it is possible that an involuntary, partial social program could be established to provide LTC coverage. The intent of this program would be to materially fund



LTC benefits for a large percentage of people who need services, but these social benefits would not be enough for all people.

With regard to scenario #3, it is expected that in-force LTC blocks would be materially impacted by the introduction of a partial social LTC program due to existing policyholders changing their coverage in light of the involuntary social benefit. Generally, a company’s aggregate risk is reduced when LTC insureds elect to lapse their policies or reduce benefits beyond what may have been expected when the policy was priced. However, would this still be the case if a social program were the catalyst for the policyholder behavior? Would the impact of the social benefit differ materially depending on the demographics of the in-force business? How would reserve sufficiency for existing LTC carriers change? The following case study aims to answer these questions.

All opinions and illustrations in this article are the sole opinions of the authors and do not represent the opinions of Milliman, Inc. The case study outlined below is not intended to be a political stance, but merely provides considerations for the future of LTC given the recent spotlight (political and otherwise) on the industry. All considerations regarding the future evolution of the LTC industry are speculative, and actual events may unfold materially differently under any given future path were such path to come to fruition.

CASE STUDY: HOW COULD SCENARIO #3 IMPACT A PRIVATE LTC INSURER?

The financial impact on LTC carriers of a partial social LTC program, as described in scenario #3 above (and in [part one](#) of this article), would be highly dependent on the specific characteristics of the insurers’ LTC business, as well as the regulations and features associated with the social program. As described in the following case study, we developed an illustrative social LTC program to analyze the impact on two sample blocks of in-force LTC insurance business, one “older” and one “newer.” Please note that this case study uses judgment-based (versus experience-based) assumptions, and the projected impacts are presented for illustrative purposes only. The assumptions and results of this case study should not be relied on for anything more than to aid in understanding possible outcomes of a change to LTC funding in the United States.

The impact of our illustrative social LTC program is financially favorable for both blocks of business tested. In terms of the projected loss ratio (i.e., ratio of future incurred claims divided by future earned premiums), the social program results in about a 1 percent decrease for the older business and an approximate 13 percent decrease for the newer business. With regard to pretax statutory gain or loss (i.e., statutory profit without consideration for taxes and risk-based capital metrics), the social LTC program is also materially favorable for each block. For the older block, pretax statutory profit increases by about 25 percent (or approximately \$182 million) while the increase for the newer block of business is nearly 350 percent (or about \$58 million).

DESCRIPTION OF LTC BUSINESS TESTED

The older block of business used in our analysis was priced in the mid-2000s, while the newer block was priced in the mid-2010s. Both blocks were individually underwritten, sold on a nationwide basis, and have an average issue age of approximately 55. Table 1 summarizes some additional key characteristics for each block.

Table 1
Key Characteristics

Distribution by Policy Characteristic	Older Block	Newer Block
Lifetime benefit period	30%	0%
Benefit periods less than 5 years	40	60
5% compound inflation	50	5
Inflation protection other than 5% compound	40	75
Indemnity benefits	20	0
Limited premium payment term	15	0
Insureds with attained ages less than 65	55	80

DESCRIPTION OF ILLUSTRATIVE SOCIAL LTC PROGRAM

Using the program adopted by Washington state in May 2019 as a reference point, along with the design of currently offered private LTC plans, our illustrative social LTC program is assumed to have the following features and requirements:

- The program provides a two-year benefit period (BP) with \$150 maximum daily benefit amount.
- The daily benefit amount is indexed annually at the consumer price index (CPI).
- Comprehensive benefits (i.e., both facility and home care services) are covered with no restrictions on facility sites of care or formal home care services.
- Benefit eligibility triggers are consistent with those required under HIPAA (i.e., two of six activities of daily living or severe cognitive impairment).
- There is a pre-funding requirement such that benefit eligibility must be gained over a three-year period. Beyond the three-year period, there is no elimination period (EP); however, eligibility will be assessed via application, which may result in a waiting period for covered services.
- Coverage is involuntary—all U.S. citizens ages 18 and older are automatically enrolled.
- The program is funded via a sales tax (or alternative mechanism) such that most people will pay for the coverage commensurate with their ability to do so.
- Coverage requires that you must use existing private benefits before using social benefits, and, similar to private LTC coverages, duplication of benefits is not allowed (i.e., individuals may not receive private and social benefits concurrently). This coverage lines up well with the evolution of the private LTC industry in recent years. That is, the industry has gradually moved to offering lower benefits (e.g., less than lifetime BPs, lower than 5 percent compound inflation, and greater than zero-day EPs). It is also comparable

to what is provided under the program adopted by Washington May 2019, which offers a one-year BP inflated at the CPI.¹

Assumptions and Modeling Methodology

To project the impact of our illustrative social LTC program on our two sample blocks of in-force LTC business, we used Milliman’s MG-ALFA® software and leveraged LTC industry experience based on the Milliman Long-Term Care Guidelines. This case study was performed using claim costs, rather than first principles assumptions.

The “baseline” assumptions underlying the model are considered current best estimate. We then developed assumptions for policyholder behavior (shock lapse and benefit reductions) commensurate with the announcement of the LTC social program and subsequent eligibility for benefits under the program. In developing these assumptions, we assumed the following:

- The social LTC program is highly publicized such that policyholders are aware of the social benefits and react accordingly with regard to their private benefits (versus being unaware and thus not reacting).
- Existing policyholders generally adjust their private LTC coverage to achieve a combined private and social benefit approximately equal to the private LTC benefits they purchased at issue. Only reductions to the underlying BP were modeled, as a simplification, rather than also considering reductions in inflation and other coverage components.
- Policyholders use their private LTC benefits prior to their social benefits as required by the social program. This also enacts waiver of premium provisions in their private insurance.

Under this scenario, the majority of in-force LTC insureds with BPs of two years or less may drop their private coverage in light of the new, involuntary, socially funded benefit. Additionally, some insureds with BPs greater than two years will likely drop their private insurance based on a better understanding of their

current health status and revised expectations of future LTC needs (relative to that at policy issue). Those with richer benefits (e.g., lifetime benefits) may elect to keep their benefits as is. Note that existing policyholder behavior may vary if the social LTC program was assumed to be voluntary (similar to the CLASS Act) rather than mandatory (similar to Social Security). In particular, if coverage under the social program were voluntary, then existing LTC insureds who have been paying premiums for years may be less apt to drop or reduce their private coverage to move into a social program. Further, a voluntarily program may have a higher potential for adverse selection.

Table 2 provides a high-level summary of the assumptions related to policyholder behavior that underlie our analysis.

We note the following with regard to the assumptions in Table 2:

- Revised claim cost assumptions were developed to reflect the anticipated reduced BP. The assumed election percentages were then used to determine the percentage of existing policyholders that reduce benefits to the lower claim cost level in the projections (e.g., for policies with an original BP of three years, approximately 50 percent of policies reduce to a BP of two years in the LTC social insurance scenario).
- We determined assumptions for the level of reduced benefit based on the currently available benefits for the blocks of business modeled, such that a corresponding premium rate would be readily available.
 - » Because the lowest BP available on the sample LTC business used in our analysis is two years, policyholders who currently have a two-year benefit do not have the option to reduce their BP. For these policyholders, we only reflect a shock lapse assumption.
 - » This approach did not always allow for a reduced benefit that aligned the resulting BP (including social benefits) with the original BP. For example, policyholders reducing from a 10-year BP to a six-year BP achieve a

Table 2
Underlying Assumptions

Original Benefit Period	Reduced Benefit Period	Assumed Avg. Benefit Reduction %	Assumed Avg. Shock Lapse %	Assumed Avg. Adverse Selection Scalar
2 years	N/A - Lapse only	0%	96%	1.05
3 years	2 years	50	45	1.06
4 years	2 years	77	16	1.07
5 years	3 years	83	8	1.07
6 years	4 years	86	4	1.06
10 years	6 years	49	0	1.05
Lifetime	10 years	11	0	1.02

total BP (i.e., private plus social benefit) of eight years rather than their original 10 years.

occurring three years later (in 2025) once policyholders are eligible for social LTC benefits.

- The assumptions shown above reflect the average reduced benefit and/or shock lapse election percentage across all attained ages for a given BP. Policyholder behavior is assumed to vary materially by attained age, with the oldest attained ages having the lowest election percentages and corresponding adverse selection scalars.
- Adverse selection scalars are calculated formulaically using the assumptions for (1) shock lapse and benefit reductions and (2) relative morbidity of those who shock or reduce benefits compared to those who do nothing. The relative morbidity assumptions vary by BP from 5 percent to 50 percent. The formula used is as follows:

$$\text{Adverse Selection Scalar} = [1 / (1 - \text{Shock Lapse \%} * \text{Relative Morbidity for Shock Lapse} - \text{Reduced Benefit \%} * \text{Relative Morbidity for Benefit Reductions})]$$

- Of the assumed shock lapses and benefit reductions, 70 percent are expected to occur upon announcement of the social LTC program (in 2022) with the remaining 30 percent

Impact of LTC Social Program and Sensitivity of Assumptions

As previously mentioned, the introduction of the social LTC program had a favorable impact for both illustrative blocks of LTC business tested. However, the impact on existing LTC carriers may be heavily dependent on policyholder behavior. To better understand how different behavior may drive the results, we performed several sensitivity tests, as shown in tables 3 and 4. For the purpose of this analysis, cash flows were discounted to Dec. 31, 2019, using an average net investment earnings rate of 4.0 percent.

Note that each scenario in tables 3 and 4 relates separately to the performance of the Social LTC program and are not stacked or cumulative changes.

In general, this case study demonstrates that a social LTC program would likely be beneficial for existing LTC insurers. For the older block of business, the present value of pretax statutory profit is materially negative in the baseline scenario. While the social LTC program reduces the expected future losses for this business, the program is not beneficial enough to produce

Table 3
Sensitivity Tests: Future Loss Ratio

Scenario	Older Block		Newer Block	
	Future Loss Ratio	% Change from Baseline	Future Loss Ratio	% Change from Baseline
Baseline	305%	N/A	110%	N/A
Social LTC Program	302	-1.2%	96	-12.8%
25% decrease in election percentages*	303	-0.6	101	-8.5
No adverse selection	298	-2.4	94	-14.3
10% increase in adverse selection	323	5.9	99	-10.1
Five year delay in program introduction	286	-6.2	89	-19.4

* Decrease applies to both shock lapse and reduced benefit option elections.

Table 4
Sensitivity Tests: Pretax Statutory Profit

Scenario	Older Block (\$ in Millions)		Newer Block (\$ in Millions)	
	Pretax Stat. Profit	\$ Change from Baseline	Pretax Stat. Profit	\$ Change from Baseline
Baseline	\$(689)	N/A	\$17	N/A
Social LTC Program	(507)	\$182	75	\$58
25% decrease in election percentages*	(553)	136	60	43
No adverse selection	(492)	197	80	63
10% increase in adverse selection	(596)	93	66	49
Five year delay in program introduction	(499)	190	100	83

* Decrease applies to both shock lapse and reduced benefit option elections.

a positive pretax statutory profit, even under the most favorable sensitivity scenario tested.

For the newer block of business, the impact of the social LTC program is more material (i.e., a larger percentage change in future loss ratio and present value of pretax statutory profit). This phenomenon is likely driven by the materially younger attained ages underlying this block, which results in a larger portion of policies expected to reduce or drop coverage in light of the social program. Further, because LTC is a long-duration product, changes may be amplified for business with younger insureds, particularly in terms of persistency and interest impact over the projection period. Additionally, the benefit period mix is less rich on the newer business so higher benefit reduction and shock lapses are assumed, which magnifies the favorable impact of the social LTC program.

The financial impact of the social LTC program on an even older block of business (e.g., in-force LTC business priced prior to the 2000s) was not tested as part of this case study. We analyzed a sensitivity test of delaying the social program implementation by five years (to 2027) as a means of approximating how the program might impact an even older block of LTC business; however, because the sample blocks underlying this case study are still paying materially more premiums relative to claims during this five-year period, the delay has a favorable impact. Lengthier delays are too speculative and were not sensitivity-tested.

CONCLUSION

While the case study performed demonstrates that a social LTC program similar to that adopted in Washington state could be beneficial for both consumers and LTC insurers, it is still un-

clear whether this type of program would be the best fit for the current social, political and economic environment in the United States. Additionally, there are a number of unknowns, including funding and program features, which would need to be addressed by regulators and actuaries before a social LTC program could be established. Nevertheless, there is a significant need for LTC, and the private LTC industry will continue to evolve to meet this need. ■



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ENDNOTES

- 1 Second Substitute House Bill 1087, 50B RCW 66th Washington State Legislature (2019).
- 2 Vrangbaek, K. The Danish Health Care System. Retrieved August 30, 2019, from <https://international.commonwealthfund.org/countries/denmark/>.
- 3 Durand-Zaleski, I. The French Health Care System. Retrieved September 11, 2019, from <https://international.commonwealthfund.org/countries/france/>.