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

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## INTRODUCTION

n 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.

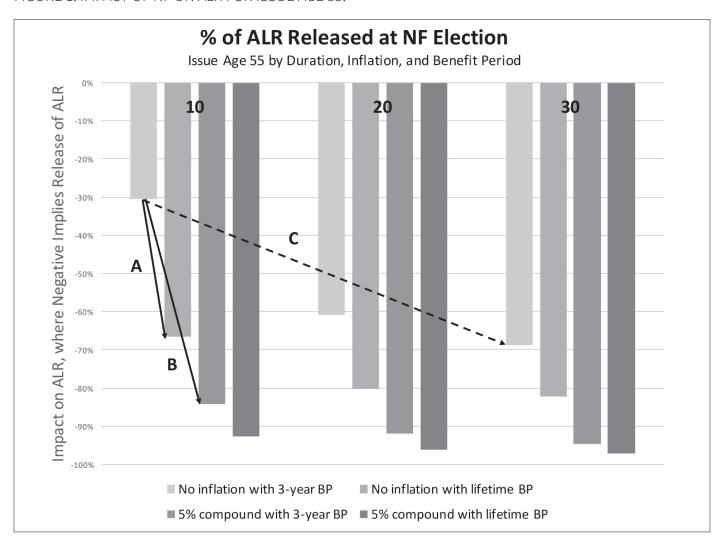
In this environment, it is important for insurers to understand the potential financial impact of offering NF benefits to more policyholders versus where only required by regulation. This article investigates that financial impact through an illustrative study. The purpose is to help insurers understand 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.

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 threeyear 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-

% of ALR Released at NF Election Issue Age 65 by Duration, Inflation, and Benefit Period  $\propto$ Impact on ALR, where Negative Implies Release of AL 20 10 30 -10% -20% -30% -40% -60% -70% Ε -80%

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.

■ No inflation with 3-year BP

■ 5% compound with 3-year BP

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.

■ No inflation with lifetime BP

■ 5% compound with lifetime BP

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.,

-90%

-100%

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).

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 <sup>[2]</sup>	PV Future Profit Aggregate of Payer & NF Election <sup>[3]</sup>	Financial Benefit to Offer NF? <sup>[4]</sup>
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

<sup>[1]</sup> Shock PVFP x Shock Lapse Rate + Payer PVFP x (1 - Shock Lapse Rate)

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

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.



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#### **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.

<sup>[2]</sup> 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.

<sup>[4]</sup> 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