Article from

Long-term Care News

November 2020

Long-Term Care Population Management: Pursuing Healthful Strategies

By Robert Eaton and Missy Gordon

More people in the U.S. will need long-term care (LTC) services in the coming decades than ever before. At the same time, the number of people with a solid plan to finance formal care is lagging that need. LTC needs are difficult to insure, evidenced by market-wide standalone LTC insurer exits and ubiquitous premium rate increases. There are hopeful emerging alternatives in hybrid life and LTC solutions, but the traditional standalone LTC policy sale is rare today with stakeholders hesitant to underwrite new risks. However, this needn't be the case forever. One strong step to making LTC an acceptable, insurable risk for insurance companies is to better understand the **latent morbidity risk in advance of an LTC need.**

Toward the goal of pursuing healthful strategies, we are creating models to estimate the morbidity risks of policyholders prior to their making a claim and needing formal LTC services. Understanding those risks can allow insurance carriers to offer healthful interventions to those policyholders who need them most, and create a situation where all stakeholders are better off. In this article we highlight the conceptual and technical precursors on this new path to LTC in force management. This is the first article in a series—in subsequent articles we will connect these concepts to results through a case study and other related research.

STAKEHOLDERS

There are many people and institutions with an interest in making LTC widely insurable. The current strategies for managing in-force populations leave many stakeholders wanting more. Figure 1 lays out how many stakeholders view the various in force management strategies in place today: premium rate increase activity, traditional claim management (including fraud detection), and—in the event that a company is suffering losses—cross-subsidization with other lines of business, i.e., other stakeholders.

A strategy of pre-claim health management, on the other hand, has the possibility of satisfying all stakeholders:

- **Policyholders** appreciate wellness and health benefits, but may be suspicious of interventions from an insurance company.
- **Insurers & shareholders** see that such interventions are expensive, but can provide positive ROI.
- **Regulators** prefer healthier residents and fewer future rate increases, all else equal.
- **Taxpayers & the general public** may be concerned if certain wellness interventions are tax-favored over others; however, the public generally benefits from healthier financial and insurance institutions.

Figure 1
Stakeholders' View of the Various In Force Management Strategies magnifying

	Premium rate increases	Traditional claim management	Cross-Subsidizing	Pre-claim health management
Policyholders	• Financial strain • Reduced benefits	• Benefit from appropriate claims paid • Reduction in fraud • Greater hurdles to file a claim	• Policyholders receiving the subsidy benefit at the expense of other policy-holders or shareholders	• Appreciate wellness and health benefits • Suspicious of interventions from an insurance company
Insurers & shareholders	• Higher revenues • Less financial strain • Administratively burdensome	• Expensive / administratively cumbersome • Premiums kept reasonable	• Prefer self-sustaining business	• Positive ROIs • Expensive upfront costs
Regulators	• Time consuming • Nationwide inconsistency • Politicization	• Want legitimate claims paid • Don't want claimants overbur-dened with process	• Prefer self-sustaining business • Multi-line insurers may be less fragile	• Healthier residents • Fewer future rate increases
Taxpayers & general public	• Sense that insurers are not accepting the risk they wrote • (Indirectly) Higher life / health premiums upon insolvency	• Generally accept claim man-agement as needed to keep costs reasonable	• Neutral	• Tax-favoring is politically difficult • General benefits from healthier institutions

Thus far, only a handful of traditional LTCI carriers have engaged in extensive pre-claim health management strategies. The difficulty lies in demonstrating that such strategies are fiscally responsible, compliant with applicable laws and regulations, and that they provide overall value. Through this series of articles we will address these considerations as part of the overall business case for proactive LTC in force management.

CURRENT APPROACHES TO LTC IN-FORCE MANAGEMENT

Most LTC carriers currently manage policyholders already on claim to ensure that they are receiving appropriate benefits. After claim adjudication and determining eligibility, an insurer will assign a case manager. The case manager develops a plan of care, documenting the services that the insured will receive.

LTC insurers monitor incoming and previously approved claims for evidence of fraud, waste, and abuse. Some claims will be denied because the policyholder is not (yet) eligible for benefits. Even if a claim is appropriately denied, the process may lead to litigation or contribute to an unfavorable perception of an insurance company and reputational risk.

In addition to active claim management, LTC insurers manage in-force blocks of business through implementing premium rate increases. While rate increases are needed to maintain an insurer's financial health and ensure that they can pay every claim dollar promised to policyholders, these increases can garner negative reactions from policyholders and regulators.

In contrast with premium rate increases and fraud, waste, and abuse detection, some insurers are considering initiatives that help existing claimants age in place. These initiatives aim to sustain a policyholder's health and prevent or postpone their entry to a facility. Ideally, the initiatives are beneficial for all parties: most insureds wish to age in place, and insurers hope to keep claimants in lower-cost care settings.

A PROACTIVE APPROACH

The primary goal of managing an active population—those not on claim—is to improve wellness or health, and to reduce future costs by delaying or preventing claims. Some claims, such as those for cognitive disabilities, may not be preventable, but may be delayable with an appropriate intervention. Other claims, such as those due to acute events such as falls, may be entirely preventable. This preventive approach is similar to disease management programs in traditional health insurance. Disease management programs focus on the early identification of members with chronic diseases to prevent or ameliorate the severity of a disease through interventions.

Many stakeholders stand to benefit from successfully translating this concept to LTC insurance:

- Insureds may see improvements in health and wellness, and age in place longer;
- carriers stand to reduce claims and increase net operating income;
- delayed claims may generate savings for the carrier by allowing reserves to accrue more investment income, funding other claims;
- these efforts may partially mitigate the need for future rate increases; and
- carriers may employ these interventions to manage LTC morbidity on the back-end for other products such as group life and/or annuity combination products that may have had limited opportunity to manage risk on the front-end due to limited underwriting.

In addition to these stakeholder benefits, as the goal of these programs is not only to reduce cost, but also to improve policyholder health, they can generate goodwill towards the carriers from other stakeholders including insureds and regulators. Further, if these initiatives are impactful, they may influence actual LTC morbidity.

Conducting any sort of wellness initiative is likely outside of an LTC insurer's traditional domain. These initiatives can also be costly, particularly when applied to large groups of people that have a relatively small portion at risk of claim. Insurers who focus and prioritize wellness initiatives on those policyholders who need them most, and who are the most likely to go on LTC claim in the near future, stand the greatest chance of earning a positive return on their investment. Building predictive models that focus on the near-term risk that consider current information about the individual can help carriers achieve this goal.

BUILDING A MODEL

Traditional LTC actuarial models project claims for 50+ years and rely on the reasonableness of long-term projected experience. These models usually use deterministic assumptions across a handful of variables, a method that is appropriate for these long-duration forecasts given the amount and quality of historical data and constraints of the projection platforms. Unfortunately, these long-term models often sacrifice short-term accuracy due to limits in the traditional variables and characteristics. For instance, long-term projections may use a policyholder's marital status at the time of issue, but this status actually changes over the life of the policyholder. A short-term model could instead use the insured's current marital status.

Recently, insurers and others in the LTC space have shifted focus on near-term experience projections for LTC policies. By developing highly predictive short-term models, insurers may be able to use these results to actively manage their in force population by identifying those that are most at risk and prioritizing them for intervention and preventive initiatives. These models are different from traditional models: they use predictive analytics to focus on short-term predictions using as inputs current information from alternative data fields and sources. Often the focus is on predicting the likelihood of a claim event, or assigning risk scores or tiers, rather than a full projection of experience over the insured's lifetime. Generally these types of models are initially rules-based and are then enhanced over time through a feedback loop that considers the impact of the interventions. Companies providing the wellness outreach are well-positioned to help with data collection and feedback for these models.

Because the models project short-term experience, they are based on predictive variables related to an insured's current state. This allows the models to consider several other variables that may not be viable for a long-term projection. These additional variables may come from the carrier, be available from public sources, or purchased from third-party data vendors. There are many vendors that aggregate data for consumer marketing purposes, and this information may be useful for early identification of claims. Third-party data vendors track many demographic, socio-economic, and consumer statistics that are generally not available to insurers, but may be predictive of future LTC experience. These variables can give short-term models better insight on an insured's status today versus traditional projection variables that often use an insured's status from when they purchased the policy. While some of these statistics may not be viable for a long-term projection, they could be very useful for a short-term projection where they can reasonably be assumed to remain static.

For example, we know that the death of a spouse raises mortality and morbidity of an LTC policyholder. Third-party data vendors not only track this event, but also how long it's been since a spouse has died. Several other potentially predictive data fields are also available, such as an indicator identifying whether someone lives alone or with family. This data can be attached at an individual-level or it can be aggregated/summarized and attached at a higher level, such as by geography. Additionally, pharmacy data from third-party sources may also provide predictive information: certain medications may be indicative of declines in cognitive ability (dementia or Alzheimer's) or increases in frailty (osteoporosis).

HANDLING SENSITIVE DATA

With all this new data that is available to us, it is important that we handle it securely and with care.

We should all be concerned about how third-parties use any of our personal data. Using this data for a good cause is a start, but that alone will not place LTC predictive modelers in compliance. We hear regular reports of data breaches from major companies with millions of people impacted. It is critical when using

personal data that all parties involved handle the data carefully and securely, following all regulations and company standards.

Actuaries are held to high professional standards. Our profession has earned the trust of the public through continued delivery of reliable products for over a century. Business partners and the general public trust that we will do the right thing with data and only use it as permitted. Breaching that trust, from negligence or intentional misuse, would injure the entire profession.

In addition to complying with all applicable laws and regulations (for example, Health Insurance Portability and Accountably Act—HIPAA), all company standards should be followed, such as enacting a business associates agreement (BAA) each time personal health information (PHI) is transferred. Some companies may also require additional agreements around data handling and storage when dealing with sensitive data such as PHI or personally identifiable information (PII).

Users can protect PHI and PII through encryption, and keep them separate by using a tokenization process. This tokenization process is already used in the insurance industry for multiple purposes such as group-level underwriting for group health insurance plans, and market segmentation for life insurance marketing.

Standardized data security protocols are a key feature in a secure data transfer process. SOC 2 Type 2 or HITRUST certifications can provide additional comfort that the data is secure and handled with care. These certifications are performed by an independent party that has audited a company's data security protocols and found them to be compliant with the highest standards. These are annual certifications and can require a significant amount of effort to ensure all procedures meet the exacting standards.

WHAT COMES NEXT

LTC in force population management is shifting to a new, proactive paradigm. This is even more relevant in today's pandemic environment where policyholders may be increasingly receptive to healthful intervention programs provided by insurers to avoid the risks associated with staying in nursing facilities. In a subsequent article we will share results of a case study illustrating how these models work in an actual LTC in force population. We believe these efforts will couple deep data analytics with smart and targeted interventions to produce financial and social returns on investment. ■

Robert Eaton, FSA, MAAA, is a principal at Milliman. He can be reached at *robert.eaton@milliman.com.*

Missy Gordon, FSA, MAAA, is a principal and consulting actuary with Milliman. She can be reached at *missy.gordon@milliman.com..*