Milliman LTC Advanced Risk Analytics™ (Milliman LARA™)

The case for long-term care

aging-in-place initiatives



Long-term care claims are expected to increase in the future as the general population ages. Aging-in-place interventions can be an effective method to improve health outcomes, reduce severity of future claims, and reduce overall long-term care claim costs.

Background

PROBLEM

The need for long-term care (LTC) services in the United States is projected to increase significantly in the future as a larger portion of the general population will be older than 65 and the number of individuals over age 85 is expected to triple. Private LTC insurance carriers are aware of this problem and have issued LTC policies to help meet this need, providing valuable protection for this risk. However, as the industry has matured, we have seen that this risk was originally underpriced.

Carriers have been mitigating this underpriced risk for more than a decade by increasing both premium rates and reserves. Many carriers are now looking for ways to manage future claim costs as an additional mitigation approach. Focused aging-in-place intervention programs can provide an efficient option to help mitigate this risk, while also improving the health and wellness of policyholders. By prioritizing the population with the highest risk of an LTC claim in the near future, carriers can achieve positive return on investment (ROI) for these aging-in-place programs. However, evaluating claim risks and measuring the effectiveness of aging-in-place intervention programs is hard.

Charges for LTC services received in assisted living and skilled nursing facilities are generally higher than those for services received in a home care setting. The higher prices are most often due to the higher severity (i.e., worse health) of claimants who need care in facilities compared to those who receive care in their homes. Aging-in-place intervention programs like The Helper Bees' Care Concierge can generate claim savings by preventing or delaying claims, or by shifting more services from a facility setting to a home care setting. When intervention programs are paired with policyholder intelligence such as that generated by Milliman LTC Advanced Risk AnalyticsTM (Milliman LARATM), the program can be focused on the most at-risk insureds and produce positive ROI for the carrier.

Consumers prefer to remain in their homes as long as possible, but they may be unable to do so if their homes are unfit or ill-equipped for aging-in-place. Additionally, individuals and their support systems may not realize that they are at risk, or they may not be aware that there are resources and services available to help them stay in their homes. In addition to potential hazards within the home, there may also be other risks that could be mitigated. For example, side effects from certain prescription drugs or interactions between drugs can pose a fall risk for elderly individuals. We believe there's a strong opportunity to increase awareness and education of these potential risks, including the actions individuals can take to be safer and live more independently. Additionally, there are many technology companies that have produced products that assist the elderly with monitoring and reducing social isolation, and these products can improve the health and well-being of the elderly.

¹ Ortman, J.M., Velkoff, V.A., & Hogan, H. (May 2014). An Aging Nation: The Older Population in the United States. Current Population Reports, P25-1140, U.S. Census Bureau. Retrieved March 9, 2022, from https://www.census.gov/content/dam/Census/library/publications/2014/demo/p25-1140.pdf.



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Historically, insurance carriers have used post-claim care management programs to manage claim costs. After claims have occurred, carriers manage them to prevent fraud, waste, and/or abuse, but little has been done—and it is difficult—to prevent a claim. While denying a claim will reduce cost, it does not improve the health of consumers and many in society may harbor negative views of insurers that do so, even if the denial is valid (e.g., it can be viewed as big insurance companies taking advantage of the elderly or doing whatever it takes to avoid paying claims). While avoiding fraud, waste, and abuse is important for carriers, pursuing additional options to manage cost that also align the incentives of carrier (lower cost) and consumer (better health) is beneficial to insurers, consumers, and society.

OUR SOLUTION

We believe that aging-in-place intervention programs can generate claim savings by preventing or delaying claims, or by shifting more claims from a facility setting to a home care setting. When aging-in-place intervention programs are paired with advanced predictive analytics, the program can be focused on the most at-risk insureds to benefit the largest number of policyholders who actually need support, while also producing positive ROI for the carrier.

Milliman's LARA product and strategic alliance with The Helper Bees can help carriers improve the overall health of their insured populations and reduce total claim costs.

Milliman: LARA

LARA is a proprietary suite of predictive modeling solutions that focuses on early identification of potential and current LTC claimants to prioritize them for interventions aimed at preventing claims, delaying their need to utilize LTC services, and/or reducing the severity of services needed.

The LARA pre-claim models provide reports to carriers that allow them to stratify the non-claimant (i.e., active) population into groups based on relative future claim risks. This stratification enables carriers to optimize the outreach for interventions, which may mitigate the incidence or severity of LTC claims. We are also developing on-claim models, which can help carriers support existing home health care claimants in their homes and delay or prevent their transfer into a facility.

The LARA suite of predictive modeling solutions is based on LTC industry data gathered specifically for this purpose. The models can also be recalibrated on a carrier's data to reflect unique characteristics of the carrier's insured population and/or available data points.

The LARA models also utilize personal identifiable information (PII) to obtain additional predictive information from third-party data vendors. These vendors provide additional data fields, such as living alone status, which may not be available to carriers, that we believe may be predictive of near-term future LTC claim experience. In addition to information from our external data partners, the LARA models also harness LTC risk tiers developed in conjunction with Milliman IntelliScript® using medical diagnosis and prescription drug information. While the focus of most LTC experience studies and projection assumptions is expected long-term future experience, LARA's focus is near-term experience. This near-term focus enables the use of alternate variables such as current marital status, which may not be predictive or viable for use in the development of long-term projection assumptions.

Milliman consultants are industry leaders with decades of subject-matter experience supporting carriers in managing LTC risk. This includes data analysis, assumption development, and modeling for LTC insurance. With this expertise and understanding of the LTC industry, Milliman is uniquely positioned to analyze the data being collected and develop powerful predictive models to identify insureds at high risk of LTC claims.

Milliman's strategic alliance with The Helper Bees allows carriers to convert the actionable information produced by the LARA models into real-world outreach and interventions to improve the health and wellness of their customers. LARA intelligence can also be used by carriers in conjunction with other wellness providers.

The Helper Bees: Care Concierge

The Helper Bees' Care Concierge program provides care coordination benefits to help improve the health of insureds and delay the use of LTC facility services. Improving health and increasing independence can also decrease the severity of LTC claims. These efforts can then lead to reduced overall LTC claim costs.

The Care Concierge program is comprised of two equally important foundational components, educational content and expert guidance. When deployed together, it is possible to prioritize and improve the overall wellness of both the claimant and non-claimant populations. The program's approach educates non-claimants and empowers them to make wise care decisions while also guiding claimants to solutions that enable aging in place.

By design, the Care Concierge team does not know the benefits provided by any insured's LTC policy. This allows the team to focus on improving the health of each insured, not on maximizing the potential benefits payable under an LTC policy.

In a continued effort to provide high-quality solutions to insureds, The Helper Bees recently launched an aging-inplace marketplace. Using the marketplace, the Care Concierge specialist can provide a recommended plan of care using the in-home care and support service available through the marketplace's vetted providers.

Each insured's interaction and utilization data is analyzed and delivered back to the carrier for unprecedented insight into policyholder behaviors, needs, and the potential interventions necessary to delay institutionalization. These insights can also be leveraged by all parties (carrier, Milliman, and The Helper Bees) to tailor initiatives or programs and refine models focusing on high-risk policyholders.

Results

Combined, Milliman LARA and The Helper Bees can help carriers effectively manage their non-claimant and claimant populations and reduce future overall LTC claim costs. In addition to generating goodwill and improving the health of insureds, the savings in claim dollars outweigh the costs of LARA and the Care Concierge program and can generate positive ROI for carriers.

In the past, many carriers have been concerned that outreach to insureds may incite the incurral of claims by reminding insureds of their policy and benefits. Due to the near ubiquitous rate increases over the last decade, we believe this risk to be reduced for most carriers. Additionally, a goal of the LARA intelligence and Care Concierge program is to reduce facility claims. A small increase in total claims would be overshadowed by a shift in incidence from facility to home health care claims.

Additional detail

MILLIMAN: LARA

The LARA industry models are currently being developed using LTC experience data collected from carriers that are supporting these important aging-in-place initiatives.

The models utilize various data sources to give carriers the option to select the information that feeds the LARA models' intelligence. These data sources give the carrier the option to include various proprietary personalized third-party data sources (e.g., consumer marketing and social determinants of health data) along with LTC risk tiers developed from medical and prescription drug information from Milliman IntelliScript. While these personalized data sources come at an additional cost, our analyses indicate they provide significant improvements in model predictivity, which is necessary to generate positive ROI for carriers. More importantly, it can also help identify more insureds who need extra care to stay in their homes longer.

In addition to the LARA industry models, carriers can also choose to have the models customized to specific blocks of business or to incorporate additional unique data sources a carrier may have in-house. This customization has the potential to improve the predictive performance of the LARA industry models even further.

Milliman has a long history of partnering with the LTC industry to support carriers as they manage their blocks of LTC policies. As mentioned above, Milliman is collaborating with multiple carriers to expand the industry data set that will be used as the base for the LARA models and future expansions. This collaboration also includes understanding the various risks and considerations for developing and implementing an aging-in-place program. Milliman can support carriers as they pilot the concept and communicate to policyholders, while also supporting the development of an efficient pipeline of data and information that can be returned into the LARA models to expand and enhance them for improved future risk analysis and program monitoring.

Because the LARA models will be regularly refined and available third-party data is frequently refreshed, we expect the pre-claim models will provide actionable findings for varying cohorts of high-risk insureds as frequently as quarterly. Quarterly intelligence updates will ensure that intervention efforts are always focused on the most high-risk insureds. Carriers may also choose to utilize LARA intelligence less frequently, such as annually. To maximize the benefit of LARA intelligence, carriers will need to provide their current insured population data, including PII, and allow Milliman to work with our third-party data partners to collect additional data.

LARA intelligence output includes a seriatim listing of high-risk insureds. This listing will include claim probabilities and risk drivers (e.g., medical/pharmacy risk tier, socioeconomic status, etc.). Potential future expansion may also include an estimate of the potential cost of claim for each individual, along with claim preventability, outreach receptivity, and intervention receptivity scores; and intervention action indicators (i.e., what types of interventions may be beneficial for each insured). Output can be customized to prioritize a certain percentage of the active population to maximize total claim savings, to maximize ROI, or to maximize the population prioritized for intervention while still generating positive ROI. While not included in the standard LARA output, savings estimates or simulations and ROI analyses could also be prepared.

By focusing on the high-risk population, carriers are able to use their resources to deploy effective interventions to the insureds who are likely to benefit most. The seriatim detail provided with the LARA intelligence output, including drivers of risk, allow for customized and focused interventions.

After receiving the LARA intelligence, carriers can proceed with focused outreach. To estimate actual savings, some carriers may elect to perform a pilot using a control group, while others may prefer to perform outreach to the entire cohort of high-risk insureds identified by LARA to maximize savings and the number of individuals who benefit from the program.

Outreach may take several different forms, including mailers (postcards, letters, etc.), emails, or phone calls. Carriers can utilize existing staff or external vendors to support this outreach. Milliman and The Helper Bees can also aid carriers in drafting outreach materials, if desired. Helpful topics to use in the outreach include local services, meal delivery services, and home modifications to support overall wellness and promote independence while aging in place.

THE HELPER BEES: CARE CONCIERGE

The Helper Bees' Care Concierge program was originally developed to help manage care for existing claims and is well suited to also provide support for pre-claim management. For a fixed monthly fee, the Care Concierge program works with insureds to identify care needs and potential providers. The goal of the Care Concierge program is to promote interventions to allow the claimant to remain at home and delay or prevent transition to facility care.

For the non-claimant population, the Care Concierge program can be implemented to provide services similar to those for active claimants, but with less frequent outreach. For insureds who need additional support, identified through an assessment, a plan of care can be developed. Services could take the form of aid in purchasing durable medical equipment (e.g., grab bars) or organizing transportation services. These services may be covered by Medicare or Medicare Advantage or paid out of pocket by insureds. In this case, the benefits could be provided without cost to the LTC insurance carrier or being deducted from an insured's LTC policy benefit.

The Helper Bees also offers an online platform that provides educational content to help insureds. As the policyholder engages with this content, the online platform delivers additional personalized content based on what they have already consumed. As the insured engages with the content, appropriate interventions can be developed for them. These interventions can be started by the insured contacting a Care Concierge expert after they have read content provided to them. Alternatively, the Care Concierge expert can reach out to the insured, once they see what materials are being consumed, and review additional information provided by the insured.

One goal of the initial outreach is to direct insureds to an online portal where they can find important information or connect with an expert. The portal allows for a personalized action plan to be created to accomplish the needed interventions. By bringing interactions online, insured behavior can be more easily monitored, providing valuable feedback to the carrier and The Helper Bees. This consumer behavioral information could also be incorporated into future refinements of the LARA predictive models.

After initial outreach via direct mail, outreach via phone can be used to provide information to insureds about the program and perform a preliminary assessment. Assessments could also be performed using an online survey. The assessments can be used to determine whether additional services may be helpful to support the insured remaining in the home.

Milliman LARA

Milliman Long-term care Advanced Risk Analytics™ (Milliman LARA™) leverages the industry-renowned expertise of Milliman consultants to uncover powerful insights about your LTC population. It uses predictive analytics, LTC claims data, and proprietary data sets to identify your highrisk policyholders before they reach severe stages of LTC needs. Early intervention empowers you to drive better health outcomes—improving a policyholder's quality of life by helping them age in place. Using a focused solution to these interventions drives ROI.

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