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OLDER-AGE MARKET: BUILDING INDUSTRY KNOWLEDGE AND EXPERIENCE

by Craig Baldwin, FSA, MAAA, and Steven Zimmerman, MD

Serving the needs of the expanding older-age market is a core growth strategy for many financial service providers including life insurance companies. Changes in longevity and health have encouraged a steady development of product offerings in order to meet the needs of higher-age customers. Fixed and variable annuities, long-term care polices and policy riders, universal and variable universal life insurance and term life policies are available to address this need. However, understanding the drivers of mortality and morbidity is essential in order to properly price and manage the associated risks while accurately identifying and developing suitable business opportunities.

Life insurers are only now beginning to gain sufficient experience upon which to base their products for this important demographic segment. Conferences and seminars on the older-age market are in high demand as knowledge sharing opportunities, and are useful ways for the life insurance industry to present and disseminate expertise and experience.

Every three years the Society of Actuaries hosts the Living to 100 and Beyond symposia, where experts from around the world gather to discuss the drivers of morbidity and mortality affecting social, financial, health care and retirement systems. For the most part, the presentations at the January 2008 Symposium addressed the population at large, not the insured population, and affirmed that the industry is leveraging its understanding of the older-age market. Future Living to 100 conferences will continue to contribute to this discussion. The next symposium is planned for 2011.

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This article provides a brief summary of the needs of older-age consumers that were discussed at the most recent conference and how the life insurance industry is transforming its approach to this market in response to changing conditions. In addition, it will focus on two issues that bear directly on managing and pricing policyholder risks at higher ages: the duration of underwriting/selection effects, and new medical tests and alternative underwriting methods.

A New Market: Opportunities and Challenges

With trillions of dollars in pension wealth and millions of livelihoods at stake, financial service providers are in keen competition to manage retirement savings and income needs. While life insurance and deferred annuities have always been key elements of retirement planning, today's older-age customers are not just seeking wealth and income protection. More often they are demanding living benefits, guaranteed investment returns and contract design flexibility. Plus they want access to their cash when they need it.

Part of delivering valuable product solutions to customers is having the ability to determine who is (and who will be) healthy at higher ages. This remains a challenge because until recently, healthy 80-year-olds were too uncommon to study. One reason for the lack of higher-age research data is that five years ago hardly anyone age 65 and older bought new life insurance due to age limits; they either renewed on policies already in force or they collected on them as beneficiaries. Now, the older-age population is a growth market for life and health products even as sales in younger demographics are decreasing. As evidence, according to the MIB, application activity in the American individual life insurance market in second quarter 2008 was down 2.5 percent from second quarter 2007, but ages 60 and higher showed a quarterly increase of 4.2 percent over the same period, the only positive segment reported. It is possible that STOLI or IOLI sales might explain the sales increase in this segment.

The Age Limit of Underwriting Selection

Life insurers need answers to fundamental questions about their mortality assumptions in order to develop effective product, pricing and underwriting solutions for the older-age market. However, because of the recent emergence of this market focus, companies have not been able to quickly develop the needed information and insight on their own. Thus, industry collaboration is essential for improving our competitive position within the larger financial services sector.

Underwriters play a prominent role in developing the theory and practice of assessing insurable risks at higher ages. In one key respect, mortality at the older ages is fundamentally altered: Given the current state of the underwriting art, at or around age 90 to 96 no lasting selection effects are possible, and understanding this limit is a major aspect of pricing for the older-age market.

The duration of underwriting selection effects eventually exhibit the characteristics of a J-curve, the arc that indicates the period of accelerated morbidity and mortality at advanced ages. Initial selection is not the concern. David Wylde of Transamerica Reinsurance notes, "Even for age 80, current underwriting methods provide strong early duration selection. The item of greater interest is that the persistency of selection effects is shorter at age 80 (less than 15 years) than for age 70 (about 20 years), despite the strong initial underwriting."

These results coincide with observations made elsewhere, wherein at extreme ages, insured mortality and that of the general population begin to converge, and life insurers need to take these findings into account.

New Tests and Methods Show Promise

The development of new tests and methods for improving risk selection will prove beneficial to improving pricing and profitability in the older-age market. Much attention is being paid to medical testing as well as other areas of development, such as physical activity indicators and cognitive assessments.

Given its importance as a driver of underwriting advances, significant attention is focused on developments in medical testing; some efforts involve recalibrating acceptable results from existing labs while others involve tests that are not commonly used to assess mortality. For example, body mass indices (BMIs) are being interpreted to better account for older-age risk. While companies generally credit younger applicants for average or below average BMIs, they are beginning to debit older-age applications for similar results because low BMIs (<22) for the elderly may mask underlying complications with severe mortality implications.

Also, when underwriting the elderly, companies are reconsidering the traditional blood panel and are turning to tests that are considered more specific to older ages. For example, rather than using total cholesterol, which is used to determine the increased risk of developing atherosclerotic disease of the heart and other arteries, tests such as NT-proBNP and hemoglobin A1c may tell much about the risk of an older-age applicant who is more likely to have already developed the disease. These tests have been shown to be associated with increased mortality due to heart failure (NT-proBNP) and to complications of diabetes mellitus (hemoglobin A1c). In this changing environment, underwriters may not always know how to interpret test results at higher ages. Increasingly, reinsurers are being asked to provide underwriting guidance, especially as direct writers typically cannot bind reinsurers for over-age-75 policies.

Interest is increasing in the use of physical activity tests such as seniors' activities of daily living (ADLs) and cognitive testing for the detection of dementia or Alzheimer's disease. Cognitive testing has been shown to be especially useful for underwriting at very advanced ages. Recent findings show that mortality cost improvements from the use of the Delayed Word Recall test ranged from 14 percent for ages 70-74 up to 43 percent for ages 90-plus on a study group of 14,631 long-term care applicants.[1] This increase in effectiveness is roughly comparable to the increase in persons with chronic conditions

[1] Ashley, Thomas. MD, FACP, VP and Chief Medical Director, Gen Re Life Health. "Cognitive Tests for Elderly Underwriting: Which One to Use?" presented at Living to 100 Symposium, Orlando, FL, on Jan. 8, 2008.

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and impairments of the senses (e.g., hearing, vision, etc.), from about 50 percent at ages 65-74 to about 90 percent at ages 85 and older.[2] Still, challenges exist for using cognitive testing as an additional, let alone replacement tool, for mortality underwriting. Chief among these challenges is consistency in administration, interpretation and application to risk assessment.

Ideally, a carrier will have in place a well-vetted integrated underwriting approach that incorporates the best of these recent medical, physical and cognitive testing improvements. One company's study of long-term care patients showed that changing some underwriting parameters reduced its claim rates in the first six years slightly through age 94, but greatly (from about 53 claims per 1,000 exposure months to 22 claims) for ages 95 and up.[3] Some of the changes included accepting greater levels of cardiac/pulmonary morbidity, refocusing on stroke risks, improving cognitive screens and redoubling efforts to identify frailty/functional decline. It will be interesting to see if other companies can achieve similar results in life insurance underwriting.

Final Thoughts

Addressing the challenges of reaching and insuring higher-age customers will be decided by how quickly the industry develops credible experience that can be translated into actionable pricing and risk management assumptions. This very likely will require collaboration within the industry.

There may be some resistance to sharing knowledge, however there are many aspects of older-age underwriting and pricing for which we do not have all of the answers and for which common efforts could yield benefits for all. It is imperative that the industry's pricing actuaries, underwriters and medical directors better understand the drivers of their mortality and morbidity assumptions in order to properly assess and price these risks.

Future Living to 100 symposia research could possibly address how incremental mortality improvements develop due to changes in medical care, lifestyles or environment. Similarly, a rigorous comparative assessment of how new medical tests and methods—including adjustments to traditional examinations—would be valuable to the industry.

The Living to 100 Symposium provides life insurers valuable insight to the most recent developments in older-age markets. The Society of Actuaries also has a number of groups and committees that regularly address this topic. ✷

Craig Baldwin served as moderator for the session "Distinguishing Health Status For Advanced Ages" at the Society of Actuaries 2008 Living to 100: Survival to Advanced Ages International Symposium. For more detail on this panel, and additional papers/panel discussions on the needs of older-age consumers, please see www.soa.org/livingto100monographs

[2] "Prevalence of Selected Conditions by Age and Sex: United States, 1984-1995." from the National Center for Health Statistics, 1995. http://209.217.72.34/aging/ReportFolders/ReportFolders.aspx

[3] Holland, Stephen K., MD. Senior Vice President and Medical Director, Long Term Care Group, Inc. "Long Term Care Insurance Underwriting Challenges at Older Ages," presented at the Living-to-100 Symposium, Orlando, FL, on Jan. 8, 2008.