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Understanding Secondary Differences in LTC Experience

Summary of Session 44 PD, 2002 Spring Meeting, San Francisco

by Philip J. Barackman

A few years ago, Long-Term Care (LTC) sessions at insurance industry meetings tended to cover only the basics. Many of us working in LTC felt we couldn't afford to skip such sessions per chance some bit of new information might be gleaned, but were often disappointed. However, since its inception, your SOA LTCI Section has played an active role in planning and coordinating LTC content of such meetings, and it has become more relevant to actuaries already working in that specialty. A good example is the Understanding Secondary Differences in LTC Experience session held at this year's SOA Spring Meeting in San Francisco. The presenters represented LTC experience from various perspectives, including actuarial consulting — Andrew Herman, FSA MAAA, consulting actuary, Wakely & Associates; insurer — John Timmerberg, FSA, MAAA, second vice president, Conseco Insurance Group; and academic research — Eric Stallard, ASA, MAAA, research professor, Duke University.

In free markets, economic opportunity tends to drive refinement in pricing, as the actual costs of products are better understood. For example, many of us still remember the days when life insurance rates did not yet reflect smoker/nonsmoker status. Once the first company adopted that significant cost parameter in its rate structure, it didn't take long for the whole industry to follow. No one wanted to be the insurer of mostly smokers by default!

Former Secretary of Defense Robert McNamara gave some advice that speaks to the need to pay attention in such situations:

- To measure what can be easily measured, that is okay, as far as it goes.
- To disregard what can't be easily measured or give it an arbitrary value, that is artificial and misleading.
- To presume what can't be easily measured really isn't important, that is blindness.
- To say what can't be easily measured really doesn't exist, that is suicide.

Secondary differences in LTC experience involve those parameters that are not necessarily explicitly reflected in premium rate structures, but appear to have emerging significance to claim costs, and therefore could lead to changes in strategies for pricing, underwriting and/or marketing LTC insurance.

So, what did the distinguished presenters identify as important secondary differences in LTC experience?

Gender

Andrew Herman pointed out that, although industry experience suggests that female-to-male ratios of claim costs are lower than indicated by the 1985 National Nursing Home Survey, female claim costs are generally still higher than males. He also suggested that some of the impact of this difference on pricing is partially offset, in that females have been known to have higher lapse rates. Andrew believes that the actuary should consider varying morbidity and lapse assumptions by gender for reserving purposes.

The *SOA Intercompany Study* shows similar incidence rates and claim continuance by gender, and this holds also for John Timmerberg's company sample data with males showing only slightly lower incidence and shorter claims than females.

Eric Stallard presented a lot of gender-specific data from his analysis of the National Long Term Care Surveys relating to residual life expectancy by disability status (non-disabled, mild/moderate disability, HIPAA ADL only, HIPAA CI only, and HIPAA ADL+CI.) He noted that much of the additional life expectancy that females enjoy over males is spent in a disabled state. He also presented disability status transition rates by gender and age grouping, which lends itself to using a Markov chain approach to modeling how a population develops the need for LTC over time.

Marital Status

Herman indicated that industry experience shows that married insureds have lower claim levels — as much as half the level of single insureds (at least in early durations.) This has led the industry to increase spousal discounts and liberalize rules for its application.

The conventional wisdom of males being slightly better risks than females, and married couples much better risks than singles, might lead one to conclude that married males have the best experience and single females the worst. However, Timmerberg's data indicated that married females have the best experience, followed by married males, single males and single females.

Timmerberg's sample data showed an extremely large (7x) difference for incidence rates for single vs. married females, whereas the incidence rates for single vs. married males was much less dramatic (1.5x). The expected length of a facility claim with a four-year benefit also showed a greater impact of marital status for females — 463 days for single and 244 days for married. For males, it was 408 days for single and 364 days for married.

Stallard noted that married males show lower mortality and disability transitions than single males; however, married females show higher mortality but lower disability transitions than single females. This might be partially explained by the traditional caregiving that married females provide their husbands, thus benefiting the male, but extracting some mortality toll on the female.

Region/Product Type

Andrew stated that although some insurers have adopted nationwide rating, emerging experience indicates the need for area or state-specific rating. Regional variations are most pronounced for stand-alone products. Facility-only products have had unfavorable experience in low population density such as Iowa, KS, MN, MO, ND, NE, and SD. Home care-only experience has been very unfavorable in areas with a high density of seniors such as south Florida, New York City, Los Angeles, Chicago, Houston and Philadelphia.

Integrated products tend to show less regional variation in experience, while stand-alone home care designs do not appear to justify the same degree of spousal discount.

Distribution Channel

Andrew believes that brokerage distribution can result in double the claim costs of captive distribution, which no doubt, can be managed more effectively. He points out that rate increase activity has so far been minimal for captive produced business. This could have rather profound implications for profitability, pricing and marketing strategies if this difference holds true for the industry. Some of this difference might be explained by broker exploitation of underwriting weaknesses in working with multiple insurers. Hopefully, this dynamic will become less problematic as underwriting continues to improve by obtaining more data, using more appropriate guidelines and making more disciplined decisions.

Education

Stallard's analysis showed some tantalizing correlations. Mildly disabled high school graduates have an increased likelihood of recovery, and are less likely to transition to CI than those who did not attain that level of education.

U.S. Population Disability Decline

Stallard observes a 1.3% per year decrease in disability in his analysis of the U.S. senior population. In the face of decreasing investment rates of return and greater persistency than originally assumed, it's nice to know that something is moving in the right direction!

The presenters shared lots of quantitative data with numerous caveats. Therefore it would not be appropriate to assume that the results necessarily apply to all LTC insureds in general (or your business in specific.) The apparent impact of these secondary differences were sufficiently impressive to underscore the need to carefully monitor and consider them in managing all aspects of the LTC insurance business including product design, marketing, underwriting and claim management as well as pricing and valuation.

If you would like further details of this session, e-mail: *phil_barackman@ gcr.com*, and I'll be glad to send hard copy of the presentation slides to your SOA listed address or as otherwise instructed.

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