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# Understanding LTC Policy Termination Experience: examining the impact of data quality

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## UNDERSTANDING AND INTERPRETING CURRENT AND PAST INDUSTRY DATA

Last year the Society of Actuaries completed a multi-phase project with the goal of conducting a comprehensive study of long-term care (LTC) experience results for the 12 year period 2000–2011. As part of this effort significant emphasis was placed in the following areas:

- 1) Securing strong industry participation in the study;
- 2) Ensuring the highest possible quality of data.

The latter goal resulted in the development and application of an extensive data validation process that was applied to all participant submissions.

LIMRA partnered with the SOA on a phase of the project that focused on examining LTC policy termination experience including both voluntary lapse and mortality results. This work

was completed in June 2015 and was based on data submitted by 22 LTC carriers representing approximately 75 percent of the LTC lives inforce over the study period. The analysis was limited to individual LTC products due to the scarcity of data provided for the group market.

An additional area of emphasis for the policy terminations work was to better understand the impact of data quality on reported results given the continued difficulty for insurers in accurately distinguishing voluntary lapse activity from deaths given the generally older age of insureds in this market. Since in most cases there is no nonforfeiture benefit at the time of lapse and no death benefit paid on these policies, there is no compelling reason for a policyholder to contact the insurer to cancel their policy. So in many cases, premium is discontinued and if a death is not reported, the assumption is made that the policy terminated due to voluntary lapse.

The impact of this phenomena has been noted and discussed in past SOA LTC experience study reports. The industry generally agrees that LTC products have exhibited among the lowest lapse rates of any products offered by life and health carriers (with ultimate lapse rates commonly assumed to be under 1 percent). However, at the same time, average voluntary lapse rates derived from data submitted by carriers to the SOA studies imply levels higher than generally accepted as well as mortality rates lower than generally accepted.

In order to better assess the past and current impact of this issue on industry reported policy termination experience, SOA, LIMRA and the LTC Experience Committee focused initial validation efforts on obtaining an understanding of differences in the level of effort being made to distinguish voluntary lapse

Figure 1: Reported Voluntary Lapse Rates Impacts of Improving Quality of Data over Time 2000-2011

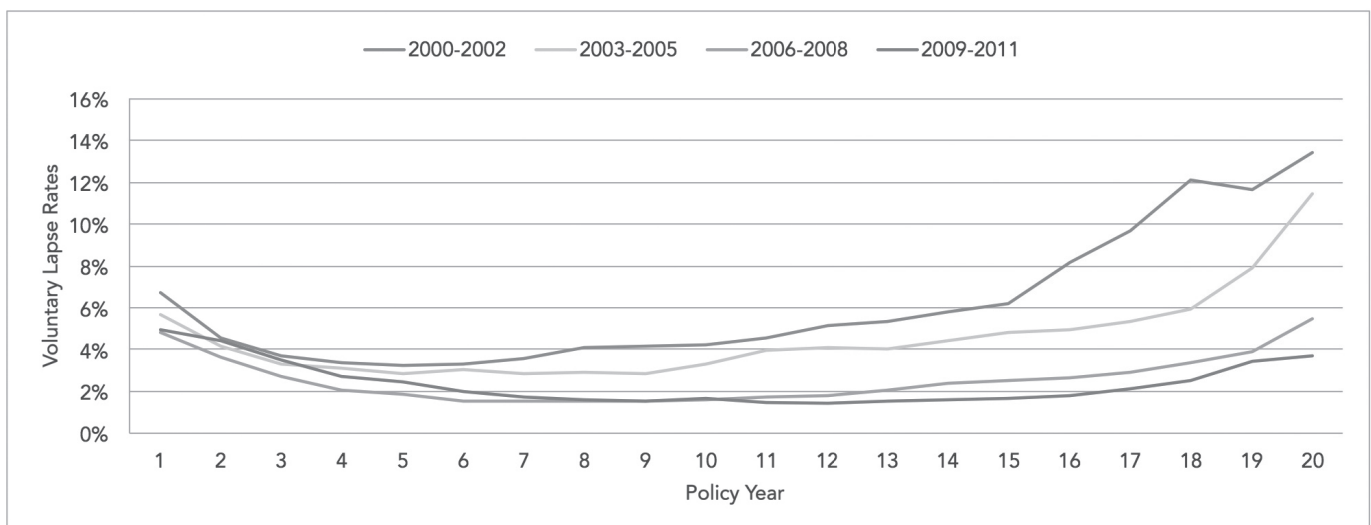


Figure 2: Reported Mortality Rates Impacts of Improving Quality of Data over Time 2000-2011

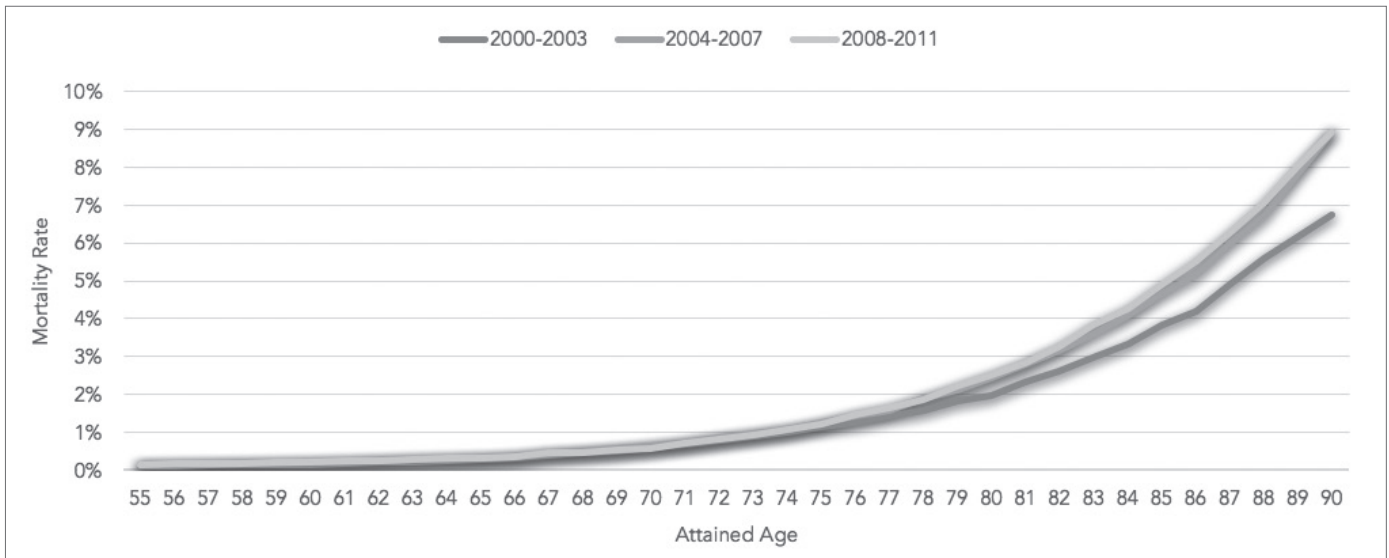
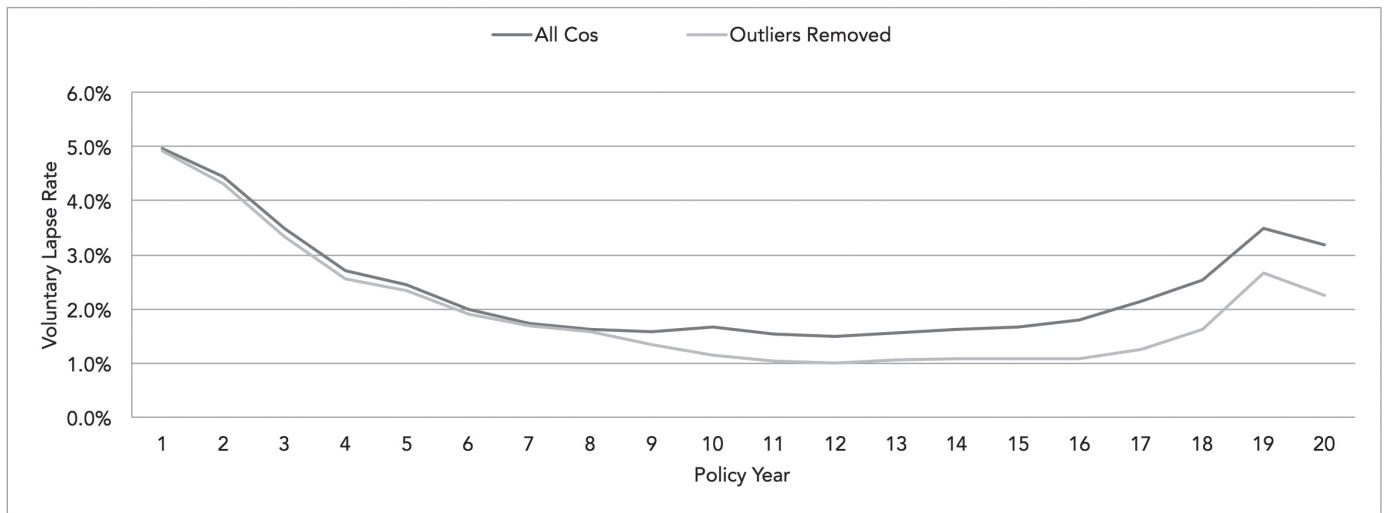


Figure 3: Reported Voluntary Lapse Rates By Policy Year 2009-2011 Experience



from mortality at the company level. Most companies have now implemented a process to better identify deaths by accessing the Social Security Death Master Files on a periodic basis and using this information to update and sometimes correct the cause of policy termination. And it does appear that the quality of reported data has improved over the experience years as these procedures are incorporated. (Figures 1 and 2)

This information led us to focus our attention on the most recent experience years where industry reported voluntary lapse rates appear the closest to current industry views. (Figure 3)

Similarly, for mortality experience, the analysis was focused on the more recent experience years where there appeared to be a

higher quality of data provided by companies. Actual reported mortality experience for study years 2004-2011 was first compared to expected mortality experience using the 2012 IAM as the expected basis. This is the most recent published annuity payout mortality experience table and is based on an older age insured population most comparable to LTC policyholders. No adjustments for mortality improvement impacts have been incorporated at this point.

The first observation—the evidence of underwriting selection effects on LTC mortality results—was noted based on a comparison to the 2012 IAM as well as to other industry tables examined as part of this work. (Figure 4)

Figure 4: Actual to Expected Mortality Ratios by Gender and Policy Year Expected = 2012 IAM Experience Period = 2004-2011

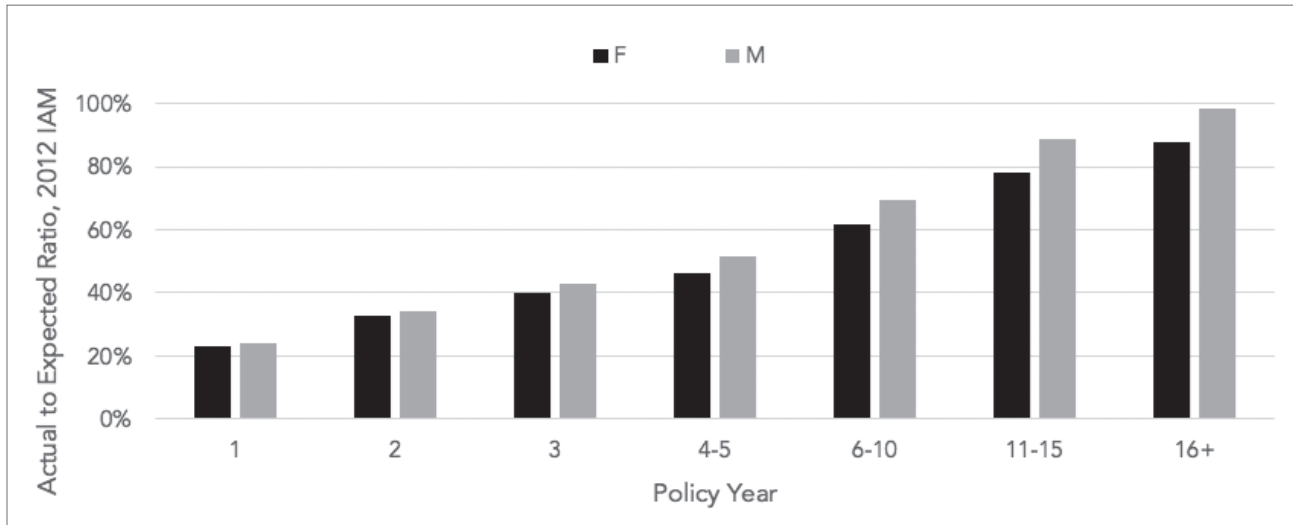


Figure 5: Actual to Expected Mortality Ratios by Attained Age (Females) Expected = 2012 IAM Experience Period = 2004-2011

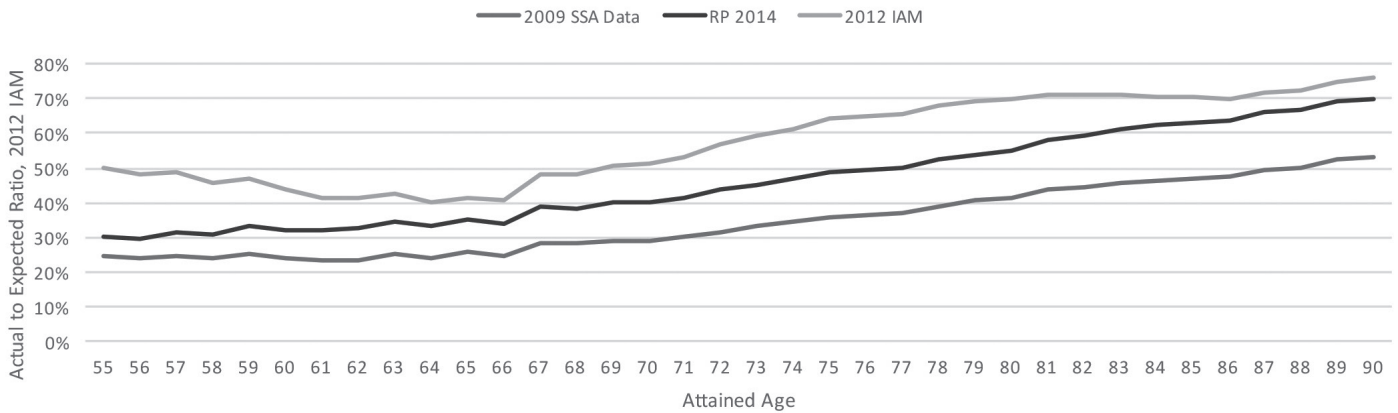
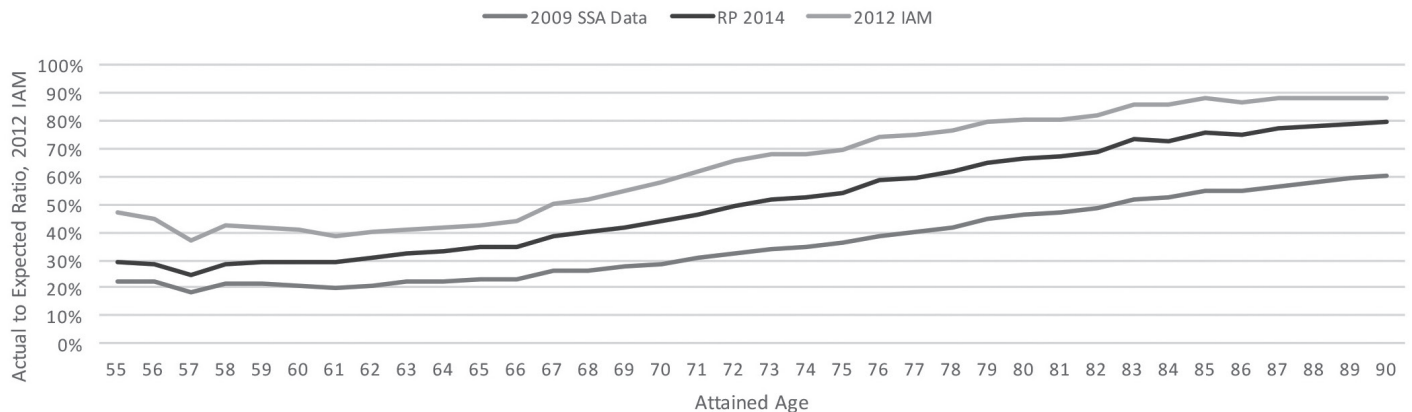


Figure 6: Actual to Expected Mortality Ratios by Attained Age (Males) Expected = 2012 IAM Experience Period = 2004-2011



Removing policies in years 1-6 to eliminate the data with the greatest potential selection impacts, we then compared actual mortality experience by attained age and gender to two recent standard mortality tables—one for individual payout annuitants and one for the pension population—the 2012 IAM and the RP 2014. In addition, the results were also compared to recent Social Security Administration reported mortality rates (2009 SSA Data).

The second observation (as shown in Figures 5 and 6) is that overall, the 2012 IAM appears to provide the closest fit to the most recent actual LTC experience by attained age and gender and could serve as a reasonable starting point for any development of industry standard LTC mortality tables. For females, A/E ratios vary from 50 percent for attained ages in the late 60s to 70 percent beginning in the late 70s. For males, A/E ratios vary from between 40 and 50 percent between ages 55 and 65 to close to 90 percent beginning in the late 70s.

Encouraged by this study's evidence of improving data quality over time, the SOA provided additional information by making the aggregated industry data for mortality and lapse experience available for download from its website. This was the first study of its kind to be published as an industry summary report accompanied by aggregated industry data provided in the form of MS Excel-based pivot tables.

It is our hope that this approach will better serve study participants and the industry as a whole in allowing for more in-depth examination of the data and results. We look forward to continuing to advance industry knowledge as more detailed and better quality data continues to emerge. ■



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