Full Report

U.S. Long-Term Care Insurance Persistency

2008-2011 Data

A Joint Study Sponsored by the Society of Actuaries and LIMRA

SOCIETY OF ACTUARIES

LIMRA

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2008 – 2011 Data

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Acknowledgements

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Overview

This report presents results for industry long-term care insurance (LTCI) persistency. This is the fourth in a series of studies conducted jointly by LIMRA and the SOA Long-Term Care Experience Committee. We examine persistency based on twenty participating companies reporting both voluntary lapse and total termination activity for calendar years 2008 through 2011. The results indicate that LTCI persistency continues to increase, with individual LTCI business increasing more than group LTCI.

Overall results in this report refer to the combination of group and individual LTCI data, unless otherwise noted.

Highlights

- Voluntary lapse rates continue to decrease overall for all policy years combined. For the 2008–2011 experience study, the overall lapse rate is 3.6 percent, versus 3.8 and 5.2 percent from the 2005–2007 and 2002–2004 experience studies, respectively. Ignoring other factors, this trend is likely to continue as the portion of new sales, with higher lapse rates, decline and the portion of older policies with lower lapse rates increase.
- The average issue age for LTCI business has been decreasing for individual insureds and increasing for group certificate holders since 2000–2001, but has stayed much the same compared to the last study. Average issue age for individual insureds for 2008–2011 is 60, and 46 for group certificate holders.
- The overall individual LTCI voluntary lapse rate for 2008–2011 is 2.0 percent, a decrease from 2.7 percent for 2005–2007. For the 2008–2011 study, younger individual LTCI policies with five policy years or less represent 25 percent of the exposure distribution, compared to 53 percent for 2005–2007.
- Voluntary lapse rates for group business also decreased, 4.5 percent for 2008–2011 compared to 6.4 percent for 2005–2007. For the 2008–2011 study, younger group LTCI policies with five policy years or less represent 35 percent of the exposure distribution, compared to 56 percent for 2005–2007. Also note that the results for group LTCI experience are based on a small number of companies and results will vary depending on the mix of participating companies.
- The total termination rate — which includes the addition of deaths to voluntary lapse rates — for 2008–2011 is 4.8 percent, an increase from 4.6 percent from 2005–2007. The overall individual and group LTCI termination rates for the study are 3.7 percent and 5.1 percent, respectively. One likely cause of the increase in total termination rate is the aging of the data population, leading to increased deaths and claims.

LAPSE DEFINITION For purposes of this report, voluntary lapse includes termination for any reason other than death. This definition includes termination for non-payment of premium, expiration of benefits, conversion, and terminations for an unknown reason (Table 2, pg. 8). This is consistent with the definition of voluntary lapse applied to past LIMRA and SOA LTCI experience studies, and allows for better comparison of results over time.

Companies with significant exposure under termination for an unknown reason or those with very few terminations labeled as deaths are excluded from the voluntary lapse analysis and only included in the total termination analysis.

Recommendations

This report examines lapse experience on individual and group LTCI products for various product factors. This report does not include short-term care or hybrid LTCI products, such as life or annuity with long-term care combination products. The study can be used for industry benchmarking as well as for background information for product development and planning processes.

The data contained in this report can help companies to identify factors that impact LTCI persistency as well as to validate pricing assumptions. While the study participants represent a significant portion of the industry, they do not represent the entire industry, and differences in results by company may vary. These results should be used only as a guide or supplement to the experience of the individual carriers. Companies should carefully consider underlying differences such as distribution, product design, product development, and marketing strategy between their own organizations and the participants.

To aid the reader in interpreting the information contained in this report, an Excel spreadsheet providing exposure and lapse information by policy factor and data cell is available on both LIMRA and SOA websites (www.limra.com and www.soa.org). A separate analysis of the mortality experience of the collected data is available on the SOA website.

Data Description

LIMRA and the SOA Long-Term Care Experience Committee jointly collected the data supporting the results of this study. Both claims and lapse studies of LTCI are based on these industrywide data collection efforts. As with past LTCI persistency studies, the data collected include individual and group LTCI plans but not short-term care, life-LTCI or annuity-LTCI combination products.

Twenty companies contributed exposure records covering calendar years 2008–2011, representing just shy of 70 percent of the LTCI industry based on LIMRA's LTCI In-Force Survey. Total exposure for the study is just over 19 million lives. Approximately 64 percent of the exposure relates to individual LTCI plans, and 36 percent relates to group plans.

Table 1 shows exposure by issue year and policy form. More detailed characteristics of the exposure data are discussed in this report, including breakdowns by issue age, attained age, gender, elimination period, maximum daily benefit amount, lifetime maximum benefit level, premium payment frequency, distribution channel, inflation protection coverage, underwriting type, and risk classification.

TABLE 1 —
EXPOSURE BY ISSUE YEAR AND POLICY TYPE

Issue year	Individual (13 companies)	Group (17 companies)
Prior to 1992	3.1%	6.4%
1992–1995	8.4%	11.9%
1996–1999	24.5%	13.9%
2000	8.3%	6.3%
2001	8.3%	9.1%
2002	9.4%	8.7%
2003	9.4%	6.3%
2004	6.1%	5.6%
2005	5.2%	5.6%
2006	4.5%	6.9%
2007	4.9%	7.2%
2008	3.9%	5.8%
2009	2.2%	2.7%
2010	1.5%	3.3%
2011	0.3%	0.3%
	100%	**100%**

Table 2 shows coverage activity during the observation period. While reported termination cause for reasons unknown has decreased from past studies, it continues to represent a weighty portion of the reported termination causes. Reported termination due to death increased significantly from the prior studies, but deaths continue to be understated as shown in the analysis of voluntary lapse by issue age (Figure 5 and 6, pg. 11 and 12 show increase lapse rates in later policy years for older issue age groups) and by attained age, (Figure 7, pg. 13 shows a steeper increase in older attained ages for individual LTCI compared to group). For 2008–2011 data, there is a separate analysis of the mortality experience.

Exposure for termination due to expiration of benefits and conversions each represent less than 0.1% of total exposure. The number of conversions tend to increase slightly with more group LTCI participants, as conversions are more likely to happen when a policyholder converts their group LTCI to an individual LTCI upon leaving an employer. The number of terminations due to expiration of benefits has stayed consistently low over the past few studies.

TABLE 2 —
LTCI COVERAGE ACTIVITY REPORTED DURING THE OBSERVATION PERIOD
PERCENTAGE OF STUDY EXPOSURE

	Individual	Group
Lapse for nonpayment of premium	3.6%	10%
Expiration of benefits	–	–
Death	3.5%	1%
Conversion	–	–
Terminated for reasons unknown	1.1%	2.3%
In force	91.8%	86.7%

– Less than 1 percent

The average issue age for LTCI business in force during the current observation period is 60 for individual coverage and 46 for group LTCI buyers. For individual coverage, this average has been slowly trending down since 2000–2001 when the average issue age was 66. These averages are expected to decrease as the average age of new sales hover around age 58 for individual LTCI buyers, with more than half of group LTCI buyers under age 50, based on LIMRA's *Individual & Group LTCI Annual Supplement.*

Voluntary Lapse Experience

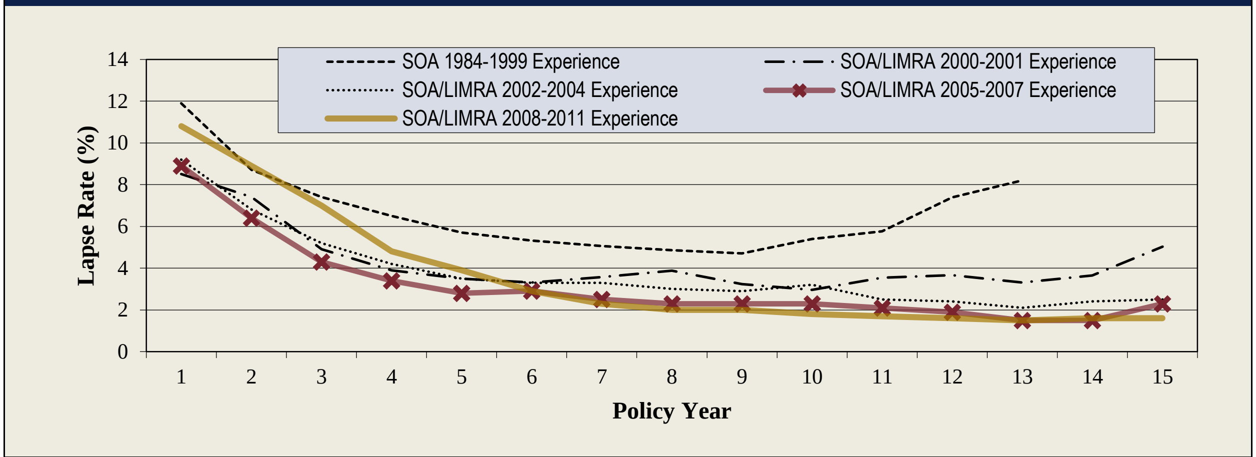
Persistency for LTCI products continues to increase. Voluntary lapse rates for all policy years combined average 2.0 percent for individual plans, 4.5 percent for group plans, and 3.6 percent for all policies combined for 2008–2011.

Companies with significant exposure labeled "termination for an unknown reason" or those with very few terminations labeled as deaths are excluded from the voluntary lapse analysis and included in the total termination section of this report. Of the twenty participating companies, three were excluded from the voluntary lapse analysis and included in the total termination section of this report. These three companies represented less than 10 percent of the LTCI industry based on LIMRA's LTCI In-Force Survey.

Voluntary Lapse Rates by Policy Year

Figure 1 shows the trend in LTCI lapse experience from several past studies. For 2008–2011, voluntary lapse rates, group and individual LTCI combined, for early policy years increased since the prior few studies. First-year lapse rates average 10.8 percent, up from 8.9 and 9.2 percent in the two prior studies. Lapse rates decrease rapidly to under 3 percent in policy year six and ultimately hover around 1.5 percent in later policy years.

FIGURE 1 —
VOLUNTARY LAPSE RATES BY POLICY YEAR (LIVES)

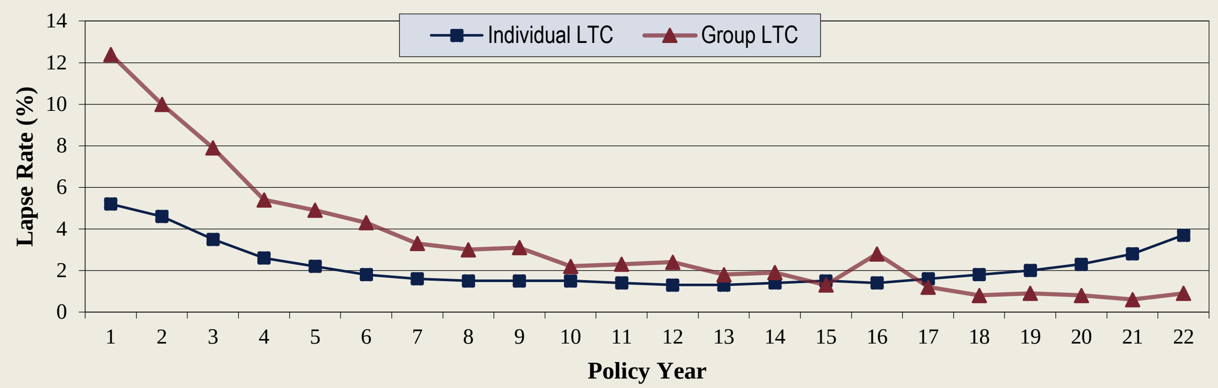


The increase in voluntary lapse rates for early policy years is likely due to several factors. The mix of group and individual exposures can impact overall results. Figures 3 and 4, on pages 10 and 11, compare trends for individual and group LTCI. While first year lapse rate is lower or similar to 2005–2007, the greater proportion of group LTCI business for 2008–2011increases overall results.

Voluntary Lapse Rates by Policy Type

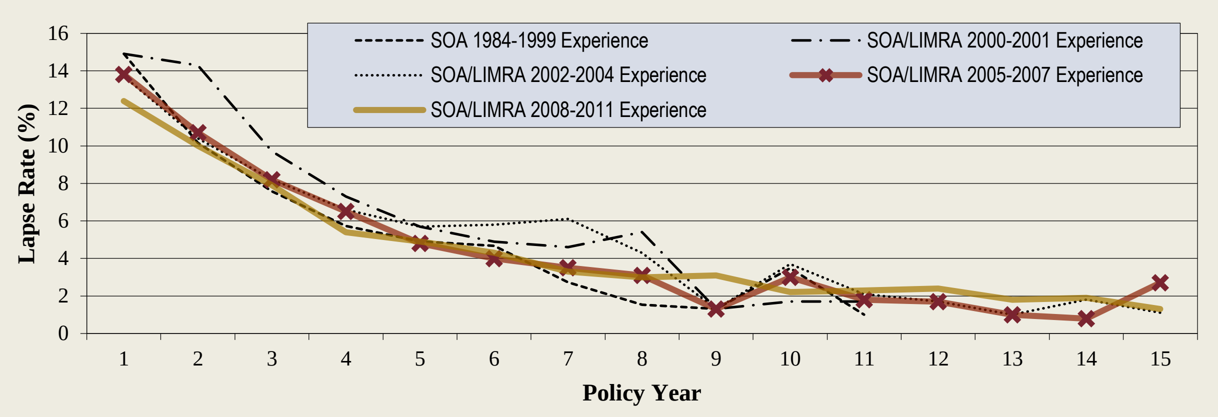
Figure 2 shows the lapse rates for individual and group LTCI. As with prior studies, group LTCI lapse rates trend higher than individual LTCI lapse rates early in the life of the policy. However, for policies in later durations, lapse rates for individual LTCI trend higher than group LTCI policies.

FIGURE 2 —
VOLUNTARY LAPSE RATES BY POLICY TYPE AND POLICY YEAR



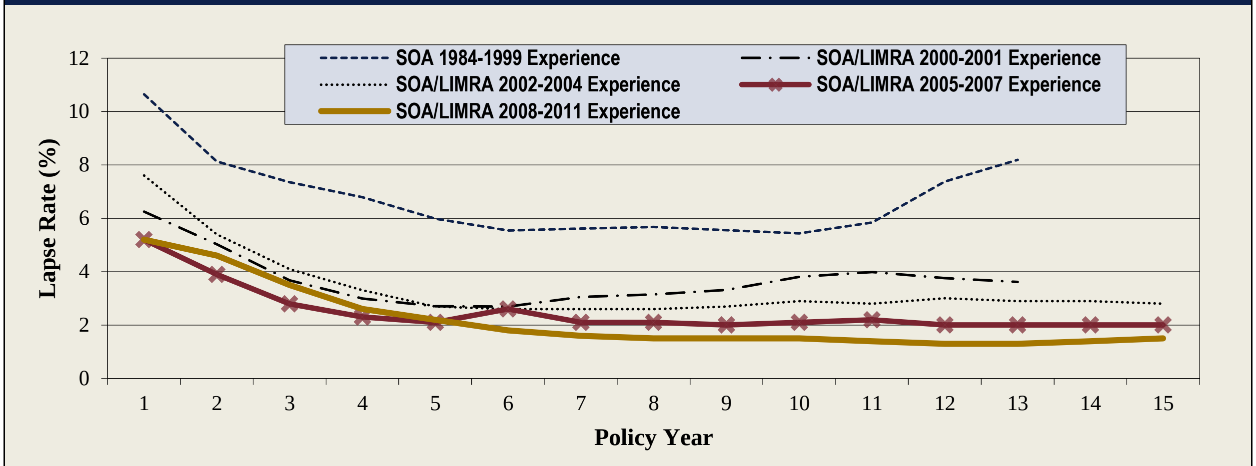
Voluntary lapse rates for group LTCI for the current study follow a similar pattern to the past few experience studies (Figure 3). The overall lapse rate for 2008–2011 decreased to 4.5 percent, from 6.4 percent in 2005–2007. This decrease is due to the slightly lower lapse rates in the first four years, which account for a greater percentage of the total exposure.

FIGURE 3 —
GROUP LTCI VOLUNTARY LAPSE RATES



Overall lapse rates for individual plans continue to decrease over prior experience studies (Figure 4). For the current study, lapse rates are lower in all policy years compared to 2005–2007, with the exception of policy years 1 through 5. The higher lapse rates in these policy years came from more than half of the participating companies.

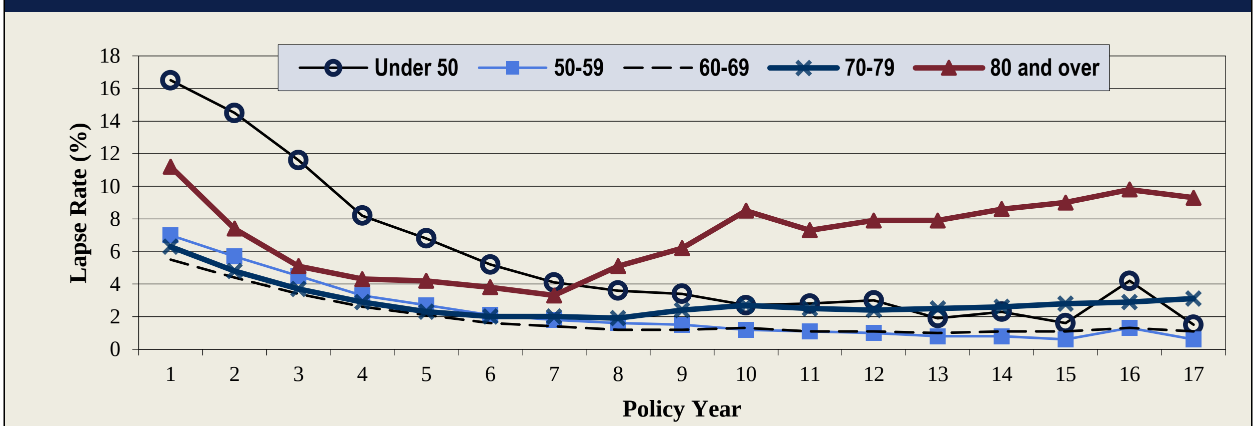
FIGURE 4 —
INDIVIDUAL LTCI VOLUNTARY LAPSE RATES



Voluntary Lapse Rates by Issue Age

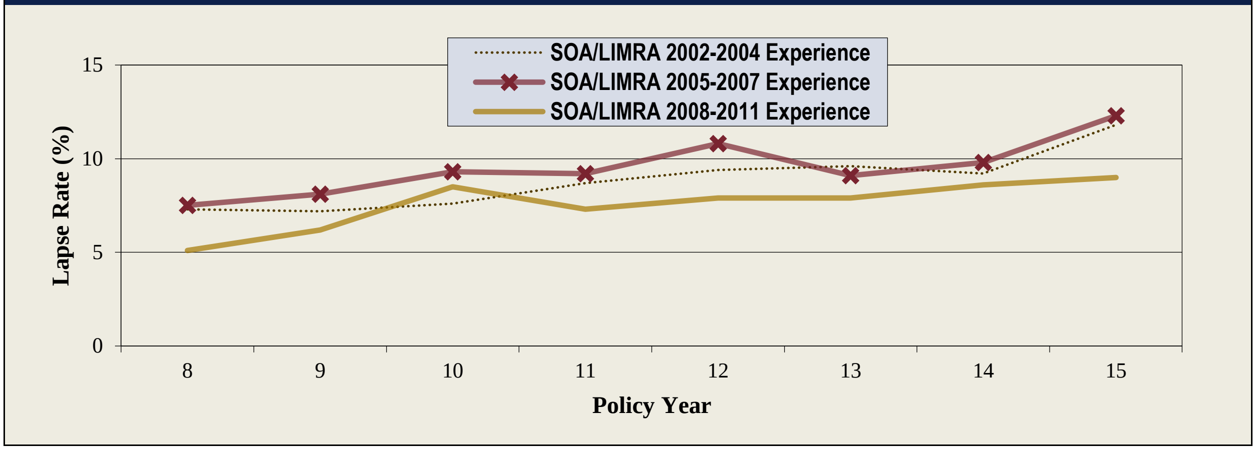
Issue ages between 60 and 79 account for 65 percent of the total exposure for 2008–2011, an increase from prior studies. Figure 5 shows lapse rates by issue age cohorts. Lapse experience for those in the 50–59 and 60–69 issue age cohorts are nearly identical and age 70–79 issue age cohorts follow closely. The under-50 issue age cohort consists of a greater proportion of group LTCI, which tends to have a higher lapse rate in early policy years.

FIGURE 5 —
VOLUNTARY LAPSE RATES BY ISSUE AGE COHORT AND POLICY YEAR



The majority of the issue age 80 and above cohort are individual LTCI. Increased lapse rates at later durations are likely due to unreported deaths and claims, which reduces the number of lives exposed to lapse and therefore each lapse carries more weight. While unreported deaths remain a problem, the data collected for the current study are a noticeable improvement from the prior two studies (Figure 6). Voluntary lapse rates for the oldest issue age cohorts are much lower and have a flatter line in later policy years compared to the two prior studies. For 2008–2011 data, there is a separate analysis of the mortality experience. Actual to expected ratio (A/E ratio) at attained age 90 is 81 percent. An A/E ratio of 100 percent implies that the number of deaths reported in the studies is the same as industry mortality tables. Ratios below 100 percent implies fewer deaths compared to the industry mortality table. While this is not an exact comparison, it does provide an estimate for the impact of unreported deaths.

FIGURE 6 —
VOLUNTARY LAPSE RATES FOR ISSUE AGE 80 AND OLDER COHORT IN POLICY YEAR 8 TO 15

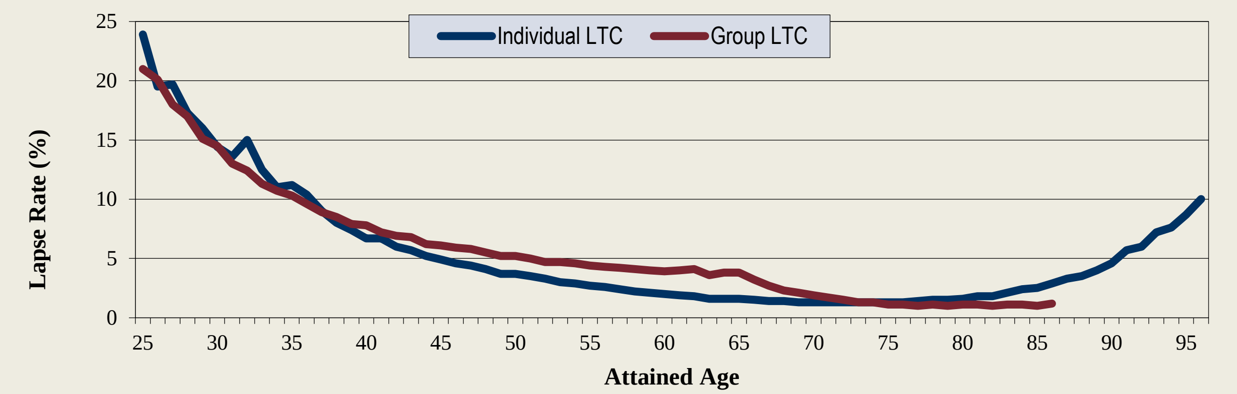


Voluntary Lapse Rates by Attained Age

Owners in their 20s and 30s have fairly high voluntary lapse rates (Figure 7), but voluntary lapse rates decrease as attained age increases. Even though there is a greater proportion of group LTCI in the younger ages, the trends for both individual and group LTCI results by attained age are similar for attained ages under 40.

Lapse rates for attained ages 40 and older continue to decrease with age, hitting a low around the start of retirement and then increasing in older ages as claims and mortality come into play. As noted earlier, the separate mortality experience analysis shows actual to expected ratio and gives an estimate of the impact of unreported deaths. For attained ages 80 and older, actual to expected ratios range from 75 to 81 percent.

FIGURE 7 —
VOLUNTARY LAPSE RATES BY ATTAINED AGE AND POLICY YEAR



Group lapse rates crossover and fall below individual lapse rates during the early retirement age range. The crossover age has increased over the past two studies (Table 3).

TABLE 3 —
CROSSOVER AGE BY EXPERIENCE STUDY

2002–2004 Experience Study	64
2005–2007 Experience Study	71
2008–2011 Experience Study	75

Voluntary Lapse Rates by Gender

The LTCI exposure base for 2008–2011 is approximately 57 percent female and 43 percent male. As with prior studies, the gender split for individual plans is more heavily weighted toward females, with 59 percent female and 41 percent male. Group plans are more evenly split with approximately 53 percent female and 47 percent male. Figure 8 shows lapse rates by gender and policy year. Overall voluntary lapse rates for females are slightly lower than for males, 3.4 percent for females and 3.8 percent for males. Similar to prior studies, females have lower lapse rates in early policy years and higher lapse rates in later policy years.

Figure 9 shows lapse rates by gender and issue age cohorts. Males exhibit slightly higher voluntary lapse rates than females for issue ages under 70, and lower lapse rates for older issue age cohorts. Actual to expected ratio (A/E ratio) by gender, in the separate mortality experience analysis, is higher for males than females. For attained age 90, ratios are 76 percent for females and 88 percent for males.

FIGURE 8 —
VOLUNTARY LAPSE RATES BY GENDER AND POLICY YEAR

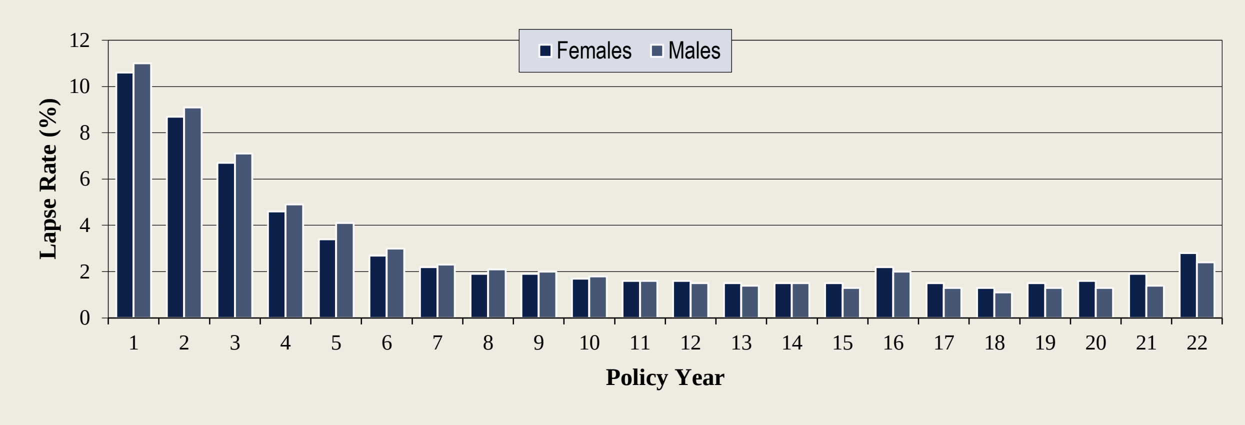
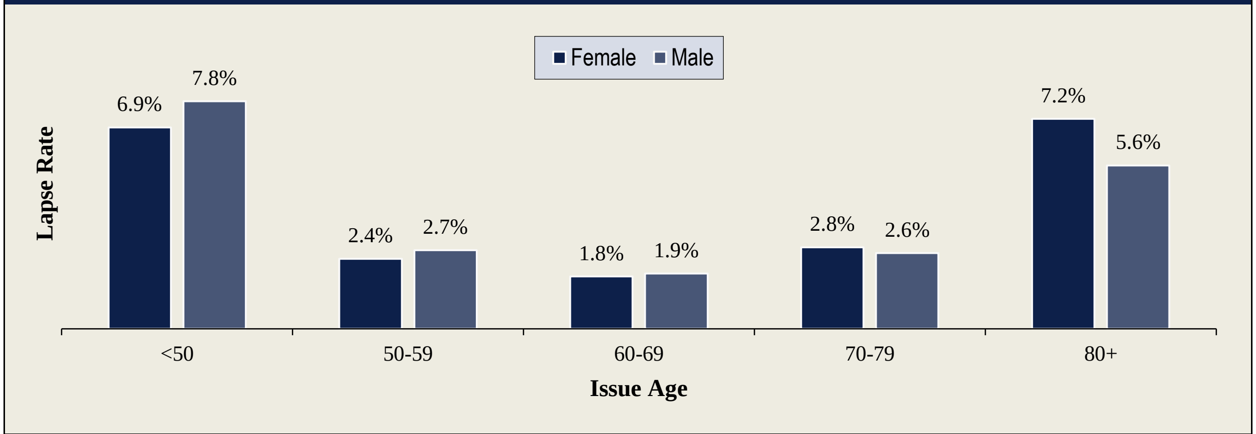


FIGURE 9 —
VOLUNTARY LAPSE RATES BY GENDER AND ISSUE AGE COHORT



Voluntary Lapse Rates by Elimination Period

The elimination period data collected for 2008–2011 was slightly different from past studies. The analysis in this section is based on an elimination period that applied to all benefit coverage types provided by the policy. Products with only one type of coverage are included in the analysis. However, products with two or more types of coverage and different elimination periods for each coverage are excluded.

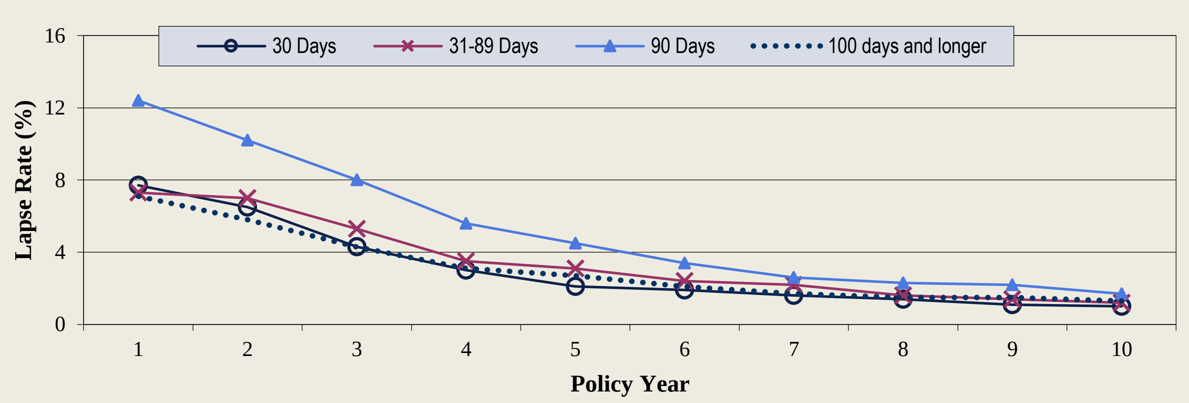
Table 4 shows the distribution of exposures by overall elimination period and their respective overall voluntary lapse rates.

TABLE 4 —
EXPOSURE AND VOLUNTARY LAPSE RATES BY OVERALL ELIMINATION PERIOD

Elimination Period	Exposure	Lapse Rate
0 day	2%	2.4%
1 to 29 days	3%	2.3%
30 days	9%	1.7%
31 to 89 days	10%	2.8%
90 days	60%	4.7%
100 days	13%	2.1%
Over 100 Days	3%	2.4%
All Elimination Periods	**100%**	

Differences in experience by elimination period are slightly visible in the early policy years, with the longest elimination period exhibiting the lowest lapse rates, with the exception of 90-day elimination period (Figure 10). Concentration in the exposure and higher lapse rates at the 90-day elimination period are due to a greater presence of group LTCI business. Based on trends from LIMRA's *Individual & Group LTCI Annual Supplement*, the majority of new sales for both group and individual LTCI have elimination periods between 90 days to less than 180 days.

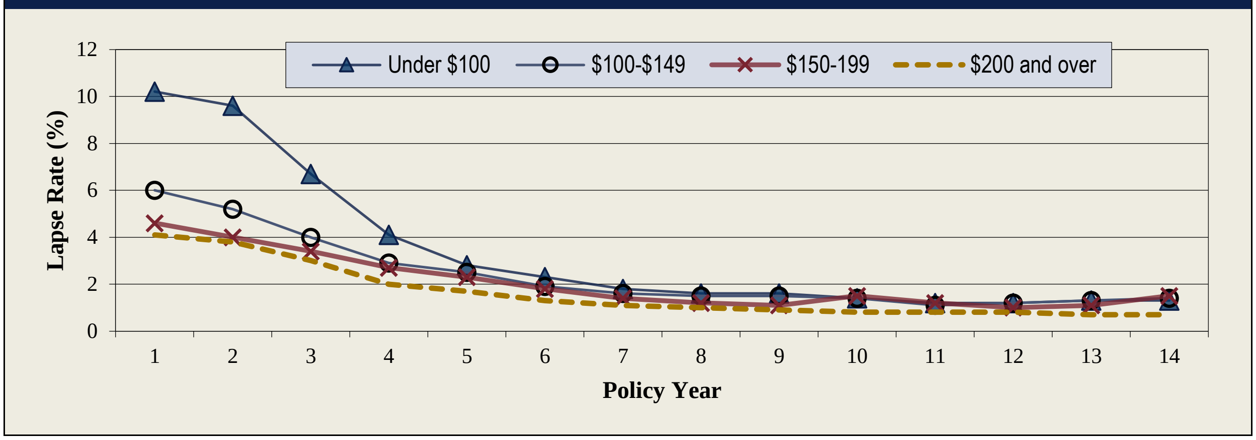
FIGURE 10 —
VOLUNTARY LAPSE RATES BY OVERALL ELIMINATION PERIOD AND POLICY YEAR



Voluntary Lapse Rates by Maximum Daily Benefit

Figures 11 shows lapse rates by overall maximum daily benefit amounts. Data was requested for maximum daily benefit at issue. If unavailable, current maximum daily benefit at time of data collection may be used. Maximum daily benefits of between $100 and $149 represent the largest portion (40 percent) of the total exposure. Policies with a maximum daily benefit of $100 or less exhibit the highest lapse rates in early policy years. After the first few policy years, maximum daily benefits of less than $200 exhibit similar trends. Maximum daily benefits of $200 or more exhibit the lowest voluntary lapse rates for all policy years.

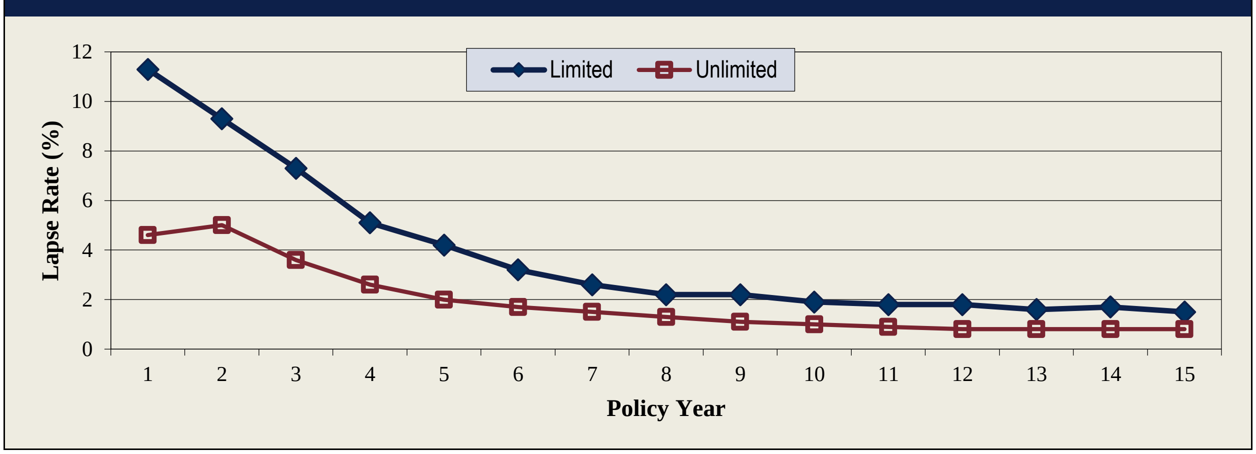
FIGURE 11 —
VOLUNTARY LAPSE RATES BY MAXIMUM DAILY BENEFIT AND POLICY YEAR



Voluntary Lapse Rates by Lifetime Maximum Benefit

Consistent with prior studies, the results from 2008–2011 show that LTCI products with limited benefits — either in terms of a number of days or a dollar amount — exhibit higher rates of voluntary lapse than plans with unlimited benefits. Figure 12 compares the experience of lifetime maximum benefit type by policy year. For all years, voluntary lapse rates for limited benefits are higher than unlimited lifetime benefits.

FIGURE 12 —
VOLUNTARY LAPSE RATES BY OVERALL MAXIMUM BENEFIT TYPE AND POLICY YEAR



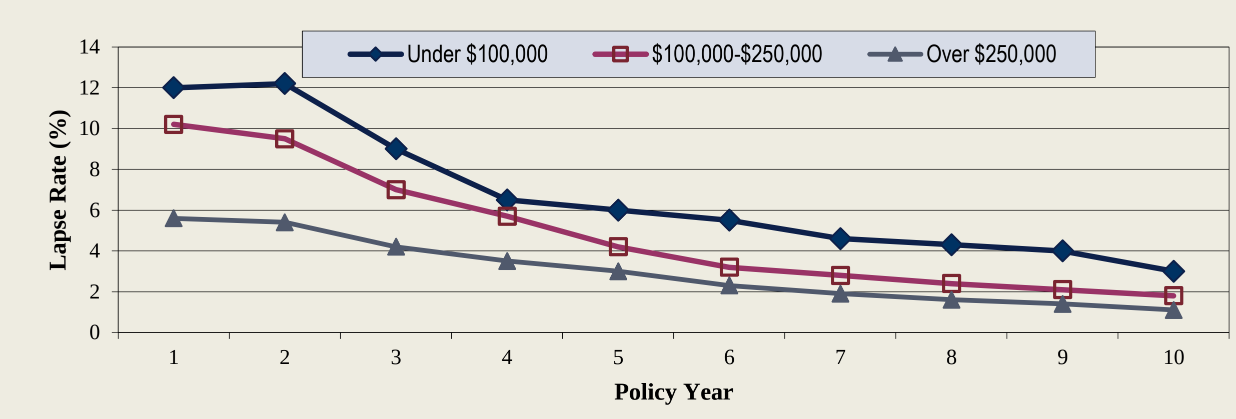
The higher lapse rates in early policy years for limited benefits is partly due to the greater presence of group LTCI business. Focusing on individual LTCI business, overall lapse rates are lower for unlimited lifetime benefits compared to limited benefits (Table 5). The comparison for group LTCI business shows a similar trend even though a very small portion of the group LTCI exposure is unlimited maximum lifetime benefits.

TABLE 5 —
EXPOSURE AND VOLUNTARY LAPSE RATES BY OVERALL MAXIMUM LIFETIME BENEFIT TYPE

Exposure	Limited	Unlimited
Group	37%	1%
Individual	39%	23%
Overall Voluntary Lapse Rate	**Limited**	**Unlimited**
Group	6.6%	3.0%
Individual	2.3%	1.4%

For plans with limited dollar benefits, there are differences in experience at various maximum benefit levels (Figure 13). Plans with higher limited dollar benefits exhibit lower voluntary lapse rates in all policy years. The group LTCI business is equally distributed among the three categories of limited dollar benefits. However, individual LTCI business is slightly weighted toward the two higher limited dollar benefits and a partial cause of their lower voluntary lapse rates.

FIGURE 13 —
VOLUNTARY LAPSE RATES BY LIMITED MAXIMUM BENEFIT DOLLARS AND POLICY YEAR



Voluntary Lapse Rates by Inflation Protection Coverage

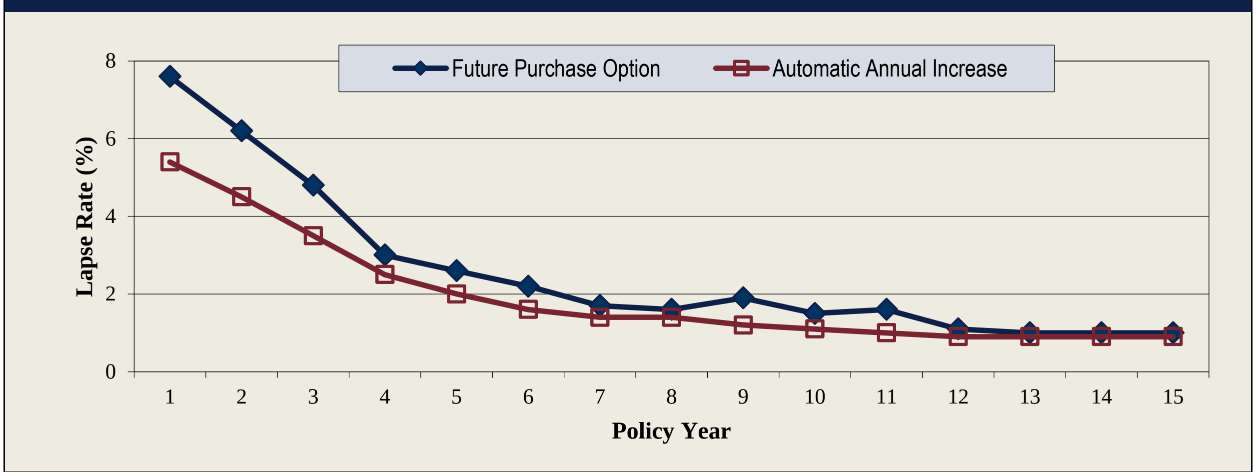
Approximately 68 percent of the exposed lives have policies that provide some inflation protection in the form of annual benefit increases, including plans that involve the pre-funding of future benefit increases. The overall trend shows that owners of policies with better inflation protection coverage are less likely to lapse (Table 6). While there is group LTCI business in each type of coverage, the proportion varies by coverage type and impacts the overall voluntary lapse rates. Group LTCI business accounts for more than 60 percent of the exposure for those with no inflation protection coverage, a reason for the much higher overall voluntary lapse rate. Group LTCI business accounts for close to half the exposure for guaranteed purchase option. There is a much smaller group presence in the other inflation protection coverages.

TABLE 6 —
EXPOSURE AND VOLUNTARY LAPSE RATES BY INFLATION PROTECTION COVERAGE

	Exposure	Overall Voluntary Lapse Rates
5% Compound	32%	1.8%
5% Simple	14%	1.8%
Guaranteed Purchase	19%	2.6%
Other (3%, CPI)	2%	2.0%
No Inflation Protection	32%	7.5%

For early policy years, plans with automatic annual increases have lower lapse rates compared to those with future purchase options (Figure 14). However, after policy year 11 voluntary lapse rates are similarly low regardless of the type of inflation protection coverage.

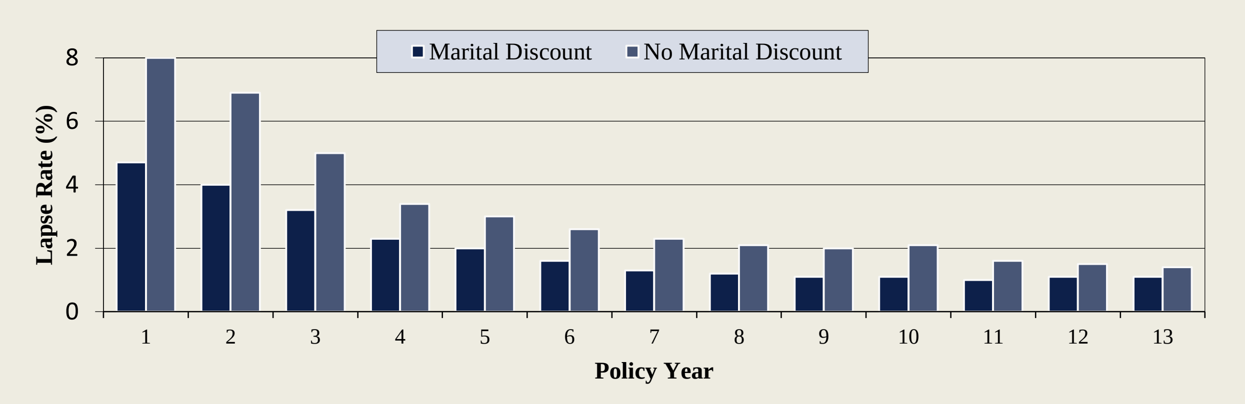
FIGURE 14 —
VOLUNTARY LAPSE RATES BY TYPE OF INFLATION PROTECTION AND POLICY YEAR



Voluntary Lapse Rates by Martial Discount Offering

As in past studies, policies with a marital discount experience lower voluntary lapse rates than those without marital discounts (Figure 15). This analysis combines both group and individual LTCI business, however only a small portion of the group LTCI business includes data on marital discount. For all policy years combined, policies sold with a marital discount have an overall lapse rate of 1.9 percent compared with 2.6 percent for policies sold without a marital discount. Marital discount is used in this analysis due to the lack of data for actual marital status.

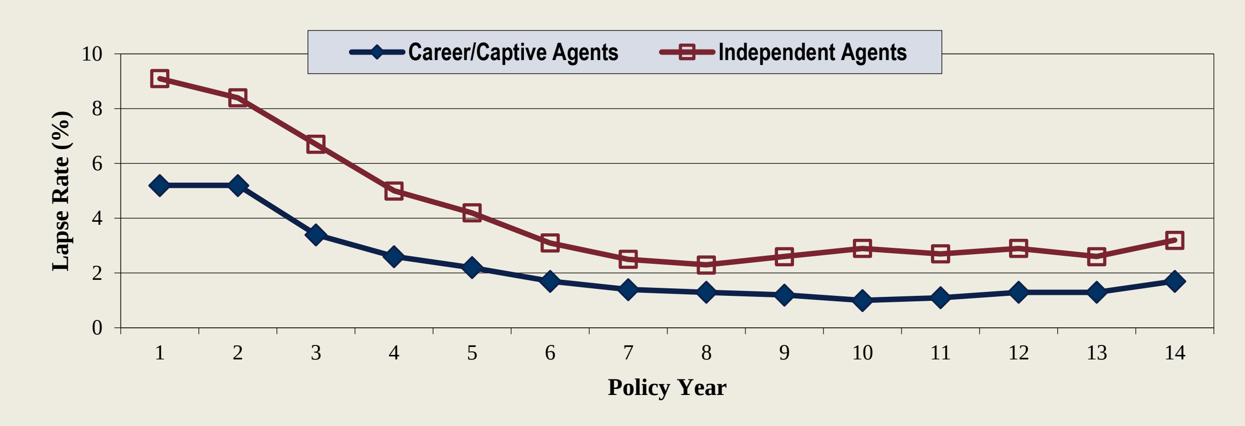
FIGURE 15 —
VOLUNTARY LAPSE RATES BY MARITAL DISCOUNT AND POLICY YEAR



Voluntary Lapse Rates by Distribution Channel

Twelve companies provided data by distribution channel, with approximately 34 percent of the policies sold through the career or captive agent channels. Figure 16 shows that the career agency system produces lower lapse rates than the independent channels. Note that this analysis combines group and individual LTCI business, and higher lapse rates in early policy years for independent agents is due in part to the greater proportion of group LTCI business. However, after the ninth policy year, when lapse rates for overall group LTCI business falls well below 3 percent, voluntary lapse rates for independent agents stabilize at around 3 percent.

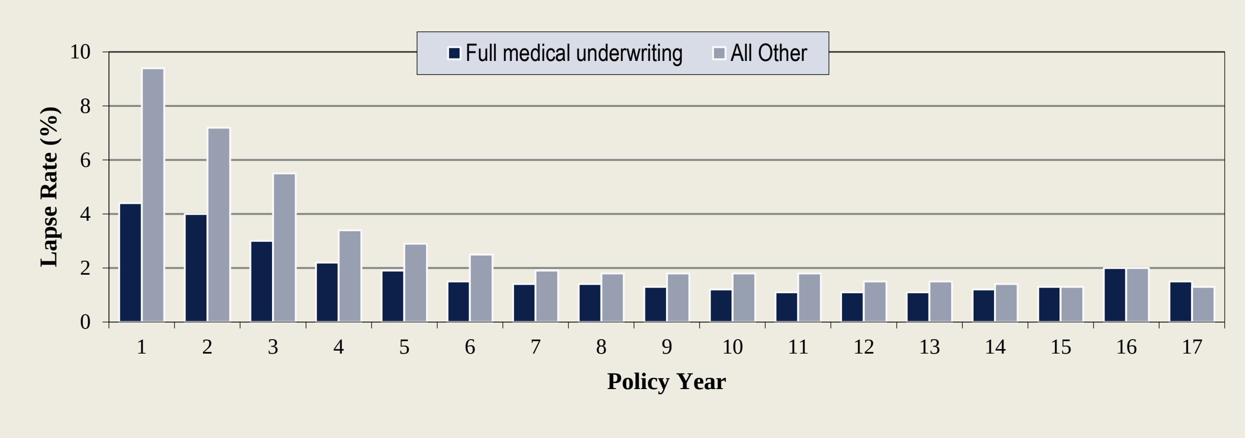
FIGURE 16 —
VOLUNTARY LAPSE RATES BY PRIMARY DISTRIBUTION CHANNEL AND POLICY YEAR



Voluntary Lapse Rates by Underwriting Type

Eighteen companies provided underwriting data for 2008–2011. Roughly 45 percent of the exposed lives hold policies issued with full medical underwriting. These policies experience lower voluntary lapse rates in early policy years compared to all other policies (Figure 17). However, lapse rates quickly decrease for all policies and hover between 1 to 2 percent after policy year 6. Simplified and guaranteed issued policies are included within the "all other policies" category.

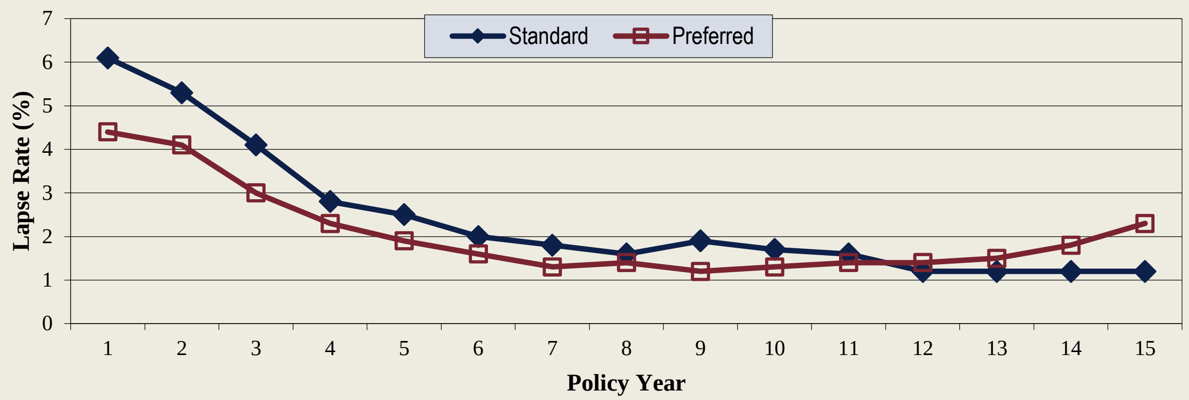
FIGURE 17 —
VOLUNTARY LAPSE RATES BY UNDERWRITING TYPE AND POLICY YEAR



Voluntary Lapse Rates by Risk Classification

Sixteen participating companies provided data by risk class. Roughly 60 percent of the exposure base was issued on a standard basis. For early policy years, the preferred class has the lowest lapse rate. But in later policy years, lapse rates for preferred class increases and exceeds those issued on a standard basis (Figure 18). This change is partially due to the greater presences of individual LTCI business within the preferred class and the likelihood of unreported deaths and impact of claims in later policy years, (see pg. 11 to 13 for additional information).

FIGURE 18 —
VOLUNTARY LAPSE RATES BY RISK CLASSIFICATION AND POLICY YEAR

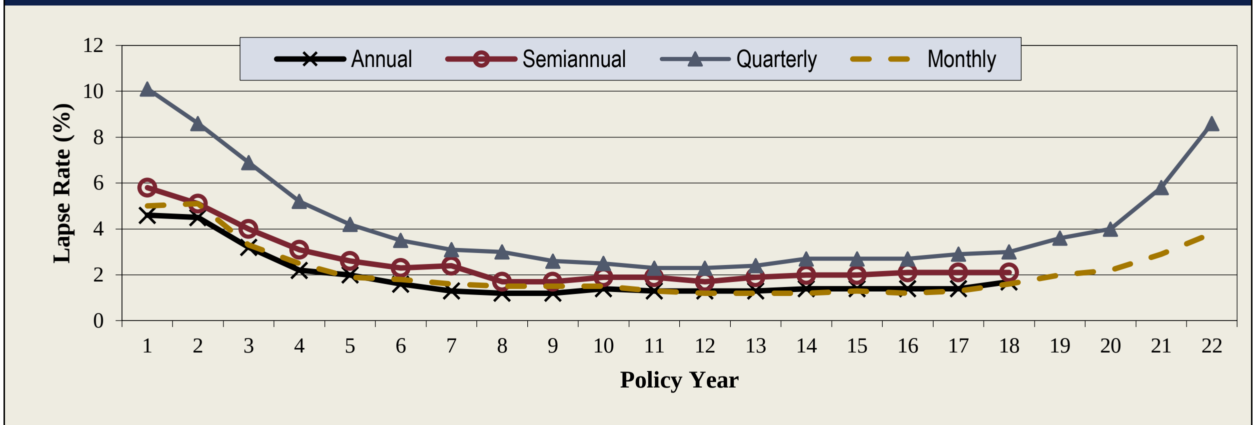


Voluntary Lapse Rates by Premium Payment Mode

Analysis by premium payment mode is limited to individual LTCI. Limited data, and the concentration of different companies focused on different payment modes did not allow for an analysis of group LTCI.

LTCI lapse rates generally increase as the number of premium payments per year increases, with the exception of monthly premium mode (Figure 19). This is consistent with results seen for other insurance products. The possibility exists that every bill a policyholder receives provides another opportunity to question the purchase decision. In addition, individuals who choose to pay larger amounts less frequently tend to be less concerned with cost and affordability.

FIGURE 19 —
VOLUNTARY LAPSE RATES BY PREMIUM PAYMENT MODE AND POLICY YEAR
Individual Plans



The exception of monthly premium mode is due to the greater percentage paid through electronic fund transfers, where premium is automatically withdrawn from a bank account.

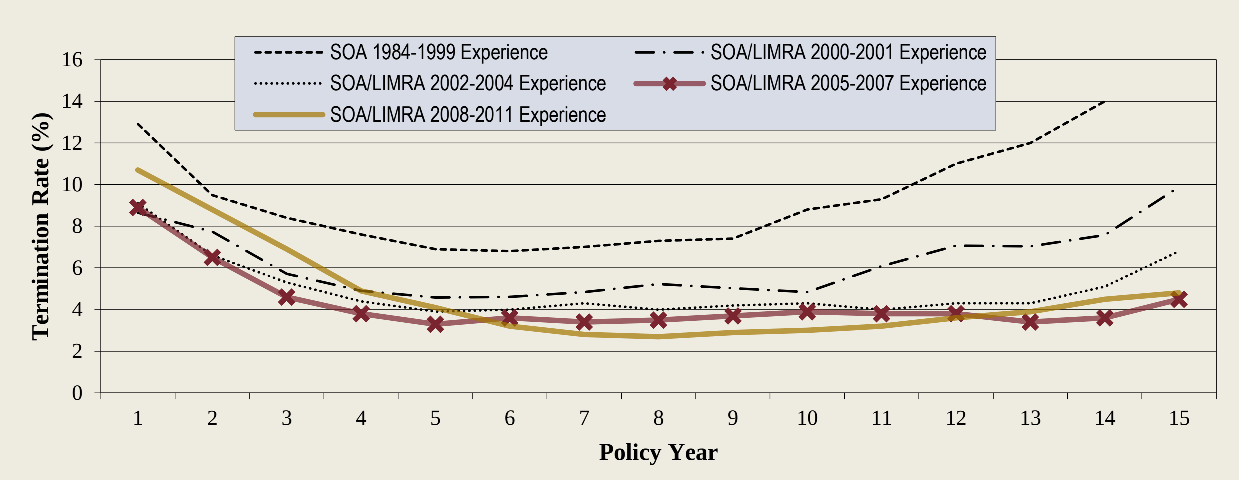
Total Termination Experience

This section of the report presents total termination rates, which include voluntary lapses with deaths. Since the data underlying the 2008–2011 experience study indicates that some companies may be incorrectly coding deaths as either lapses or terminations for an unknown cause, it is important to examine total termination rates as well as voluntary lapse rates. This will assist companies that may be pricing using a specific mortality table in combination with a separate lapse assumption to determine whether their total termination assumptions are reasonable. In addition, the three participating companies excluded from the voluntary lapse analysis are included in the results of this section.

Total Termination Rates by Policy Type

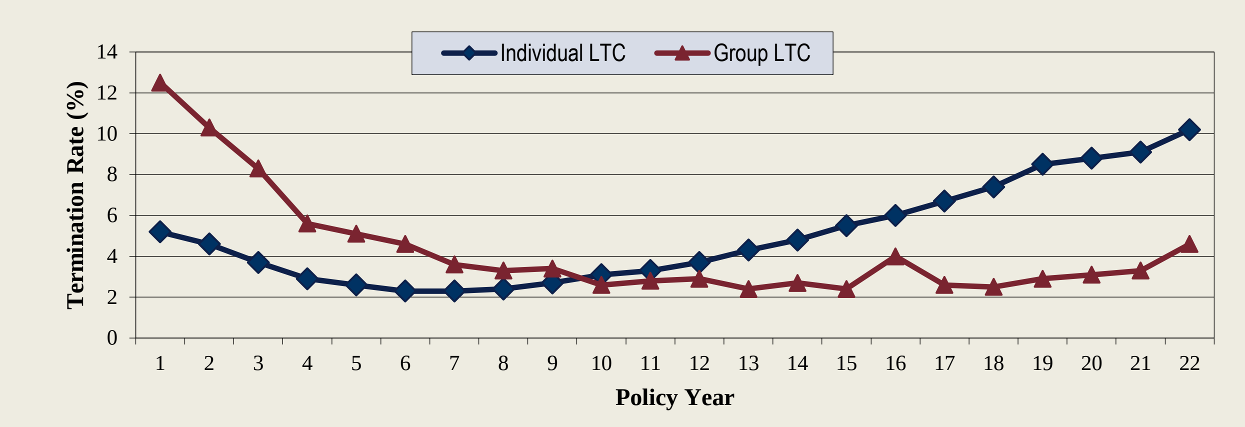
The rates of total termination for LTCI business increased over the prior study for the first 5 policy years (Figure 20). The total termination rate for the current study is 4.8 percent, up from 4.6 percent in 2005–2007. This is partially due to the different mix of participating companies for the two studies, rather than a potential change in industry trends. Increases in later policy years are due to the impact of deaths and claims. While exposure for a policy ends when claim is initiated, the pool of possible terminations also decreases, giving each termination more weight.

FIGURE 20 —
TOTAL TERMINATION RATES BY POLICY YEAR



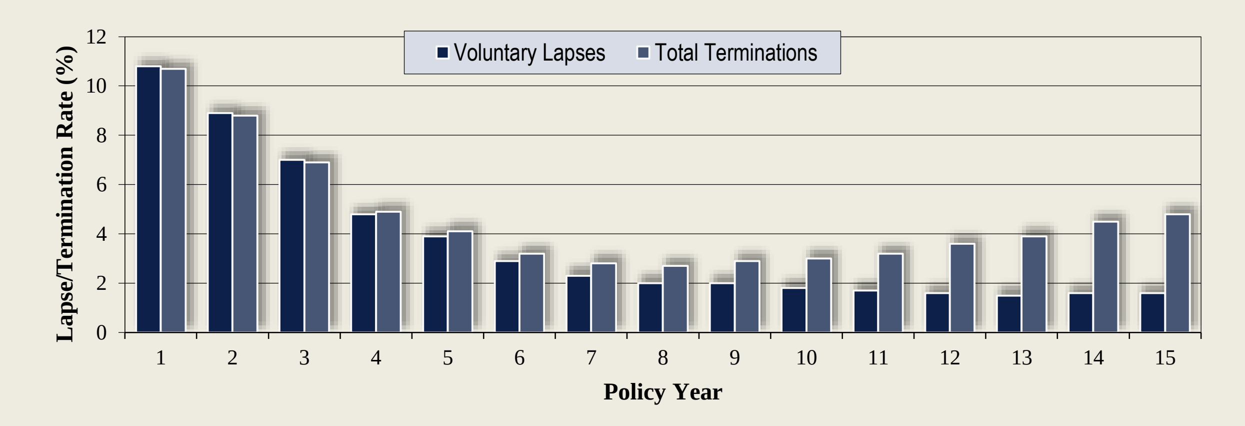
Due to differences in the average age of the buyer, individual and group LTCI business exhibit different patterns of total termination by policy year (Figure 21). While group plans experience higher voluntary lapse rates in early policy years, these plans experience lower total terminations in later years — hovering between 2 and 4 percent. Total terminations for individual plans begin to increase after policy year 7, when the impact of mortality becomes greater for the older age buyers of individual LTCI plans. Overall total termination rates for individual and group LTCI are 3.7 percent and 5.1 percent, respectively.

FIGURE 21 —
TOTAL TERMINATION RATES BY POLICY TYPE AND POLICY YEAR



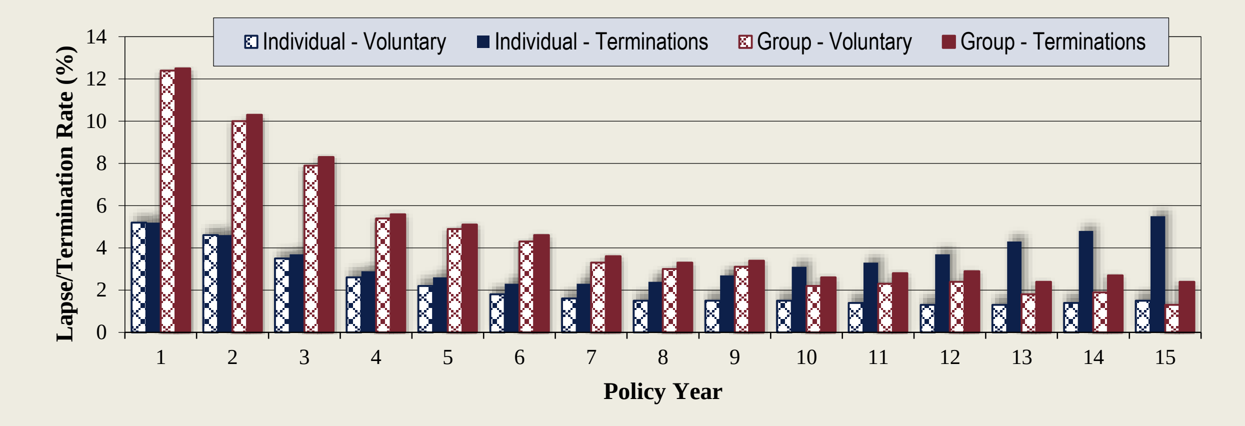
When comparing rates of total termination with rates of voluntary lapse, a different trend begins to emerge in policy year 7 (Figure 22). As voluntary lapse rates trend toward a decline, total termination rates begin to increase gradually — presumably due to the impact of mortality.

FIGURE 22 —
VOLUNTARY LAPSE AND TOTAL TERMINATION RATES BY POLICY YEAR



Most of this impact comes from individual plans, with termination rates more than three times the voluntary lapse rates in policy year 15 (Figure 23). For group plans, the differences between voluntary and total termination lapse rates are not as significant, due to the younger age of group LTCI buyers. For policy year 15, total termination rates are less than double the voluntary lapse rate.

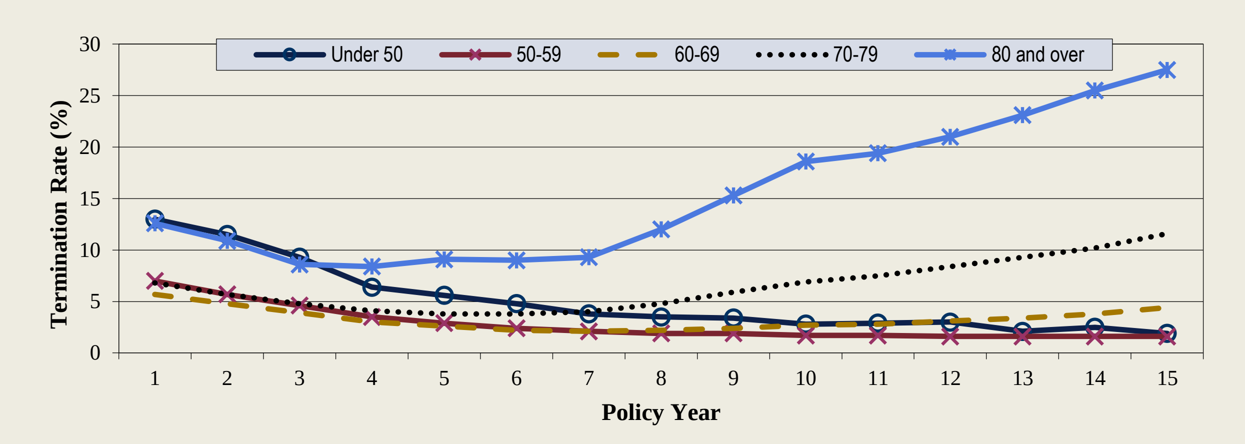
FIGURE 23 —
VOLUNTARY LAPSE AND TOTAL TERMINATION RATES BY POLICY TYPE AND POLICY YEAR



Total Termination Rates by Age

Figure 24 shows total terminations by issue age group. Total termination rates increase with policy years for older issue age cohorts. For issue ages 80 and older cohorts, death begins to make up a larger portion of the total terminations starting in policy year 7. A similar trend is seen in the 70–79 issue age cohort, but starting at a later duration and increasing to a lesser degree.

FIGURE 24 —
TOTAL TERMINATION RATES BY ISSUE AGE COHORT AND POLICY YEAR



Voluntary lapse and total termination rates by attained age show little difference at the younger and pre-retirement ages (Figure 25). Total termination rates drop to 2 percent at attained age 69 before the impact of mortality. Voluntary lapse rates decline to 1.3 percent in the early 70s before increasing. As mentioned in prior sections, the increase in voluntary lapse rates in older attained ages is more likely due to the increase of unreported deaths included in voluntary lapses rather than a shift in policyholder behavior at the older ages.

FIGURE 25 —
VOLUNTARY LAPSE AND TOTAL TERMINATION RATES BY ATTAINED AGE

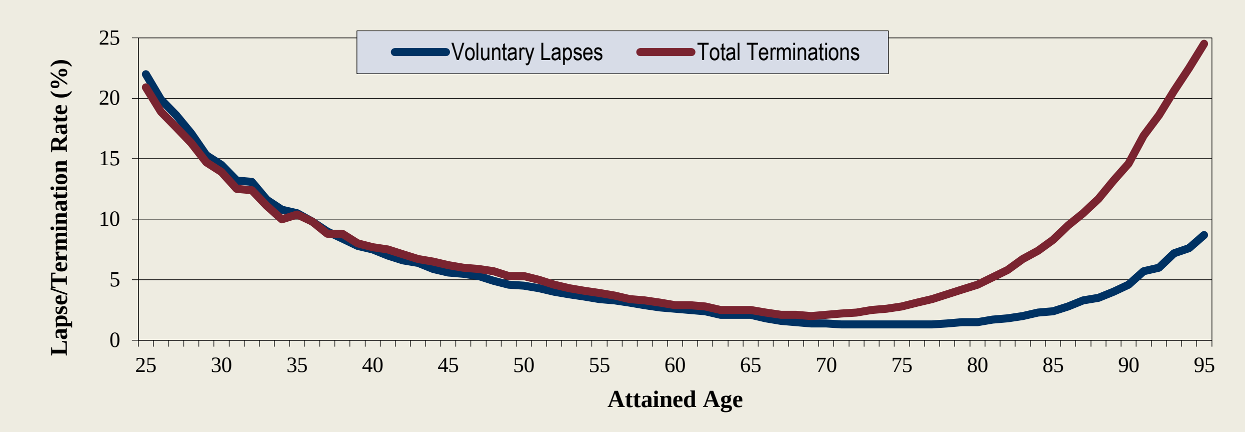
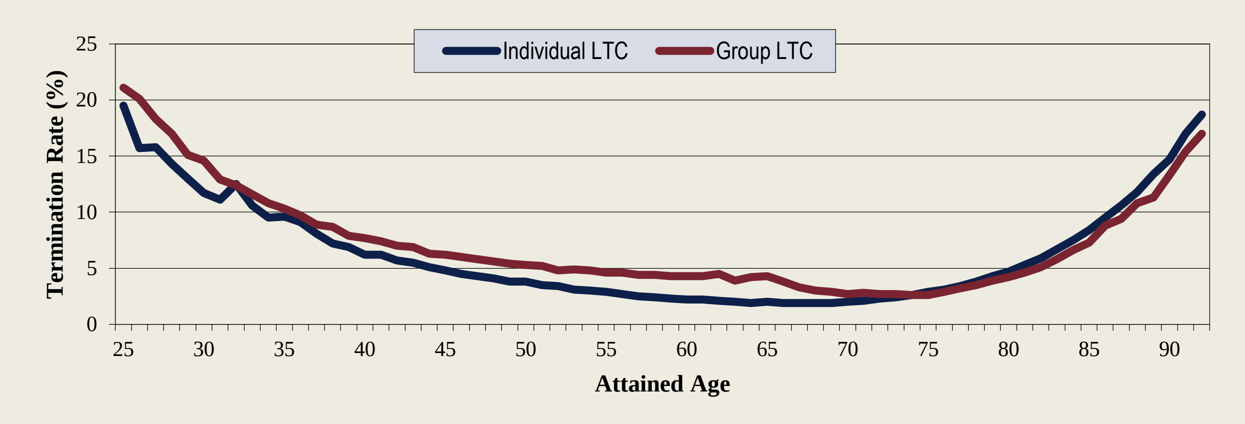


Figure 26 shows total termination rates for group versus individual LTCI plans by attained age. For both voluntary lapses and total terminations, rates for the group and individual plans cross at attained age 74. In the case of voluntary lapse rates, as discussed in the earlier section on attained age, the group plans continue to stay level at around 1 percent after the crossover (Figure 7). This is due to the more accurate reporting of death within group plans. However, total termination shows a similar increasing pattern after age 74 for both group and individual LTCI.

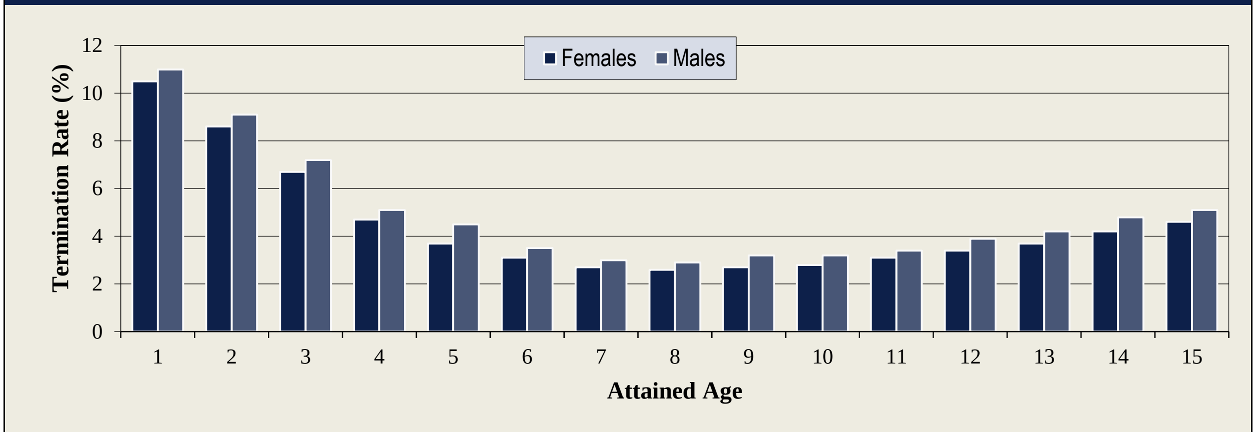
FIGURE 26 —
TOTAL TERMINATION RATES BY ATTAINED AGE AND POLICY TYPE



Total Termination Rates by Gender

Similar to voluntary lapse experience, total termination rates do not vary greatly by gender (Figure 27). For 2008–2011, overall termination rate for males is 5.1 percent compared to 4.5 percent for females. The gap between males and females for termination rates (0.6 percent) compared with voluntary lapses (0.4 percent) is likely due to higher male mortality.

FIGURE 27 —
TOTAL TERMINATION RATES BY GENDER AND POLICY YEAR



Methodology

For purposes of this report, voluntary lapse includes termination for any reason other than death. This includes termination for non-payment of premium, expiration of benefits, conversion, and terminations for an unknown reason. This is consistent with the definition of voluntary lapse applied to past LIMRA and SOA LTCI experience studies, and allows for better comparison of results over time.

The observation period for the study is 2008 to 2011. We asked participants to provide information on their entire in-force block. The lapse rates shown are based on 100 percent of lives submitted, except in cases where a company's volume of business was so large or its experience was so different from that of other participants such that overall industry results would be unduly skewed. In either of these situations, a sample of the participant's total in force was included in the study so that industry results had appropriate company representation.

We collected the data underlying this report on a policy-level, seriatim basis as this allows for a more detailed analysis of the factors influencing lapse results than studies conducted on an aggregated data basis.

Lapse rates are calculated as follows:

$$\text{Annualized Lapse Rate} = 100 \quad \times \quad \frac{\text{Number of Lives Lapsed During the Year}}{\text{Number of Lives Exposed to Lapse During the Year}}$$

The number of lives exposed to lapse is based on the length of time the policy is exposed to the risk of lapsation during the year. Lapses contribute exposure for the full 12 months. For voluntary lapses, terminations due to death are not included in the amounts lapsing and contribute to exposure for only the fraction of the policy year they were in force. The individual company data underlying this study produce a pattern of voluntary lapses by policy year that indicate some deaths may have been coded incorrectly as lapses. To address this issue, we examine both rates of voluntary lapsation and total termination rates for LTCI plans. A separate study estimating mortality experience is available on the SOA website.

Industry lapse rates are calculated as a weighted average of the experience of all contributing companies; companies with larger in-force blocks will affect the overall results more than companies with smaller in-force blocks. However, we also examine results for each policy factor analyzed at the company level to insure that reported experience is not overly affected by one or more large participant blocks.

Lapse rates are not reported for any data cell for which there are fewer than three companies or less than 1,000 policies exposed.

Experience is reported exactly as calculated with no attempt to level or smooth results, with the exceptions stated above.

Participating Companies

Allianz Life	Mutual of Omaha Life
Berkshire Life	New York Life
CalPERS	Northwestern Long Term Care
CNA	Penn Treaty American Corp.
Fortis	Prudential Financial
Genworth Financial	Senior Health
John Hancock	State Farm Life
Lincoln Benefit Life	Thrivent Financial
Massachusetts Mutual Life	Transamerica
MetLife Companies	Unum

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