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Managing Long-Term-Care Persistency Risk

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Speakers will comment on: (1) findings from the SOA Long-Term-Care Report, (2) pricing implications, and (3) steps taken to affect persistency results.

Mr. Gary L. Corliss: This is the third of five sessions that are being held on the topic of long-term care at this Colorado Springs regional meeting. This particular session is on managing the long-term-care persistency risk. There will be three presenters. The first will be Patricia Fay. She's a member of the SOA Long-Term-Care Experience Committee. She will be reporting on persistency information from that effort. I will be the second presenter, and am also a member of the SOA Long-Term-Care Experience Committee. Then we finish up with Peggy Hauser who was a member of the SOA Long-Term-Care Valuation Task Force.

Ms. Patricia J. Fay: The SOA Long-Term-Care Experience Committee published an Intercompany Study in January 1995. This study examined data from the 1984–91 experience period. The committee asked for updated experience for 1992–93. We have received some updates, so we will discuss the interim results from these data. This update includes experience for issue years 1986–92, which represents the experience period of 1986–93. We had a high of over 500,000 exposures for the 1988 period and just under 100,000 for 1992.

Lapses in both studies were defined as termination other than death. There were data codes that could indicate termination for nonpayment of premium, expiration of a benefit period, death, termination of the group, conversions, upgrades and so on. All of these codes, with the exception of death were considered a lapse.

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Note: The charts referred to in the text can be found at the end of the manuscript.

The tables that follow include data by issue year, by issue age, by elimination period and by gender. For each table the data has been grouped by six durations. Duration one lapses were defined as any termination occurring in the 1st to the 13th month after issue; duration two, therefore, would be terminations in the 14th to the 25th month after issue.

The 1986–93 study includes data from 14 different companies including both group and individual writers. Six of these companies which contributed data have not provided any updated experience. Thus, the data that was contributed for the 1984–91 study has been included in only the first four durations of this study. Of the remaining eight companies included, three are brand new contributors. The remaining five companies included provided updates to their data which was submitted for the 1984–91 study.

All of this data was accepted in a raw, unedited state. The committee did not attempt to make any corrections. In most cases, results appear reasonable, however, there was one set of data significantly higher than any other set, especially in the fifth and sixth durations. These data were excluded from the 1986–93 study presented here. The committee will discuss these results with the contributor to verify that the data have been interpreted correctly and are appropriate to include in the final study. Another point of caution is that data have been aggregated from many different companies with different distribution methods, different products, different pricing levels, and different target markets. Any one of these factors needs to be considered when determining whether the data are appropriate for your company. Additionally, depending on how the data are coded, mortality could unintentionally be included.

Table 1 compares the average lapse rate by duration between the two studies. Average lapse rates have decreased at each duration with a total decrease of 2.5% (from 15% to 12.5%) indicating that experience has been improving. However, the 1986–93 study includes a slightly different mix of companies, that may account for a portion, but not all, of this decrease. In particular, the exclusion of the data set discussed previously accounts for the majority of the decrease in duration four. Additionally, the trend of decreasing lapse rates with increasing duration clearly continues and is even more pronounced in the more recent study.

TABLE 1
COMPARISON OF AVERAGE LAPSE RATES

Duration	1984-91 Study	1986-93 Study	Difference
1	17.4%	15.5%	-1.9%
2	12.9	11.3	-1.6
3	12.5	10.1	-2.5
4	14.1	9.1	-5.0
5	-	8.3	-
6	-	6.0	-
Total	15.0%	12.5%	-2.5%

Charts 1 and 2 are graphs of the data from Table 1. Chart 1 represents the 1984-91 study. Chart 2 is the newer 1986-93 study. The center line in both graphs (indicated by the square points) is the average lapse rates. Again, the trend of decreasing lapse rates with increasing durations is clearly illustrated. The bottom and top line represent the first and third quartile (marked by diamond and triangular points respectively). The first quartile is defined such that 25% of the companies in the study had results lower than their average lapse rate and 75% of the companies had results higher. The third quartile is defined as the point where 25% of the companies had lapse rates higher than the average. The differences between these lines are pretty significant demonstrating that there is a lot of company-to-company variation between the lapse rates. One clarification is every cell included in the study had to have at least 2,000 exposures. This minimizes the distortion due to data with little credibility.

Chart 3 illustrates the lapse rates by issue year and only includes results from the 1986-93 study. Clearly, lapse rates have consistently decreased with each new issue year. This is most likely the results of replacement of older policies, upgrades or conversions. The market continues to develop new features and policies not included in older policies inducing lapsation.

Charts 4 and 5 illustrate lapse rates by issue age. These graphs demonstrate that lapse rates are directly correlated with issue age.

Both studies are consistent and decrease by duration at every issue age as well. Also note that the lapse rates start to collapse with increased durations. This may be the start of a trend, so we will need to monitor future results. It may indicate that after some select period, lapse rates are independent of issue age or some other factors.

From the Floor: Pat, are there any results for under 50, like 40-49 or was there not enough exposure?

Ms. Fay: There are not many companies with enough data in these cells. Table 2 compares lapse rates by different elimination periods. The data have been grouped into three categories, zero days, 15–45 day elimination periods, and 60-day elimination periods.

TABLE 2
COMPARISON OF LAPSE RATES BY ELIMINATION PERIOD

Duration	1984–91	1986–93	Difference
0 Days			
1	27.4%	25.6%	-1.8%
2	19.8	17.6	-2.2
3	19.3	15.3	-4.0
4	20.1	14.7	-5.4
5	–	12.7	–
6	–	7.6	–
Total	23.5%	20.0%	-3.5%
15–45 Days			
1	15.1%	14.2%	-0.9%
2	12.2	11.0	-1.2
3	13.1	10.6	-2.5
4	13.9	9.7	-4.2
5	–	9.6	–
6	–	6.8	–
Total	13.8%	12.1%	-1.7%
60+ Days			
1	12.8%	12.0%	-0.8%
2	9.5	8.9	-0.6
3	8.9	7.6	-1.3
4	10.9	7.1	-3.8
5	–	7.0	–
6	–	7.2	–
Total	11.0%	9.6%	-1.4%

For every elimination period, the average lapse rate has decreased anywhere from 1% to 5%. Lapse rates for the zero-day elimination period are much higher than for elimination periods of 60 or more days. This significant difference by elimination periods illustrates the effects of different lapse rates. Companies need to take these factors into consideration when comparing published lapse rates to their experience.

From the Floor: Do you think this is more a factor of distribution by companies in the study as opposed to higher lapse rates with the zero day? Do you have an opinion as to why the zero day is higher?

Ms. Fay: The difference in lapse rates between the zero-day elimination period and the others is so dramatic, I think it is significant and not solely due to company variation.

From the Floor: I meant within each company, do you think this is consistent?

Ms. Fay: We have looked at this, and it appears to be consistent not only across the industry, but within each company that markets different elimination periods. Charts 6 and 7 display graphically the information from Table 2. The categories had to be revised slightly between studies due to the addition of a 45-day elimination period policy in the 1986–93 study. Lapse rates tend to decrease with increasing length of elimination period. The 15–45-day period and the 60+ day period are very close while the zero-day period is significantly higher. The trend of decreasing lapse rates by duration is also apparent. Of particular note, the lapse rates in the 1986–93 study begin to converge at the sixth duration, again indicating that as time passes, it appears that individual factors start to have a small impact on lapse rates.

Finally, Table 3 compares lapse rates by gender. In the 1984–91 study, the lapse rates differed by 2.3%, with female lapses higher at 15.4%. In the 1986–93 study, female rates continued to be higher by 0.8% at 12.7%. Both sets of lapse rates have decreased since the prior study.

TABLE 3
COMPARISON OF LAPSE RATES BY SEX

Duration	1984–91	1986–93	Difference
Males			
1	17.8%	14.9%	-2.9%
2	13.3	10.7	-2.6
3	12.8	9.4	-3.4
4	14.4	8.7	-5.7
5	–	7.9	–
6	–	6.5	–
Total	13.1%	11.9%	-1.2%
Females			
1	16.8%	15.8%	-1.0%
2	12.3	11.5	- 0.8
3	11.9	10.2	- 1.7
4	13.7	9.4	- 4.3
5	–	9.0	–
6	–	7.4	–
Total	15.4%	12.7%	-2.7%

In conclusion, the experience committee is pursuing data from those companies that hadn't updated their previous data. Once that data is available, the final report can be published.

From the Floor: For the companies that included replacement activity, are those figured as lapses?

Ms. Fay: It depends on how the individual companies have coded it. If they've coded it as a termination, then it is considered a lapse in the study. There isn't a separate code for replacements so there may not be consistency as to how they are coded. That could be why the one company had very high lapse rates.

Mr. Corliss: My presentation will discuss actual persistency results from two stressed blocks of long-term-care business administered by my firm's third party administrator.

The first company was a life and health organization that had sold a sizable amount of long-term-care business in one particular state. It also had sold a number of other life and health products. The company decided it did not want to be in the long-term-care business any longer because of unfavorable claim experience. It filed for a 100% rate increase which was implemented just as we took over the administration. Brokers for this company still were paid their compensation for any

ongoing business that did renew. Then they turned it over to us as the administrator. Whenever you have a change of administrators, a change in persistency is to be expected. People get concerned when there is a change.

The second company was a health only company that sold a variety of individual products, but mostly senior products like Medicare supplement and long-term care. This company, also had poor claim experience, and about a year prior to our involvement, had been putting 30–50% rate increases into effect. Then they were put under state jurisdiction and were declared insolvent. The National Guarantee Association selected our third party administrator to manage the business on their behalf. Rate increases continued for almost one year under our administration as the previously approved increases became due. The Guarantee Association determined that there would be no brokers' compensation payable for the business that stays on the books.

I'd like to give an overview of the two case studies. One has a 100% rate increase and brokers being paid commissions. The other has a 30–50% rate increase for an insolvent company where the brokers are not being paid compensation. I look at the level of stress of these two blocks as being generally about equal. I've combined their experience to share with you. The results on 6,000 policyholders were followed over a four-year period of time.

Before showing you some numbers, I just want to make a few comments about changes of administrators. It doesn't matter whether it's internal to a company or external to another organization. Certain things happen when business is turned over. We have toll-free telephone lines that come directly into our claim department, underwriting area, and billing and collection unit as soon as the announcement goes out that a new administrator is going to be taking over.

We have a lot of policyholders that are 70 and 80 years old, who have time to read these letters. They have time to make telephone calls especially to toll-free numbers, and they do. The main objective behind the calls, whether they are on claim or not on claim is to see whether there really is somebody at the other end of that toll-free number. We always spend a great amount of time assuring people that we are there, ready to help, and that the organization behind their policy is reputable and will honor their claim. Secondary to assurance, we may answer some questions about the coverages that they do have. Some people have even forgotten that they had purchased something called long-term care insurance. They know they're paying premiums, but they don't always know exactly what protection they are paying for.

As I share a few tables about the experience of these two blocks, keep in mind the numbers from Pat's presentation. She pointed out how the lapse experience collapses over time, decreasing by duration to a lower and about equal level, regardless of a variety of things. She also demonstrated a difference by issue age, a difference by elimination period, and a difference by gender.

For these stressed blocks of business, the new administrator came in at various policy durations but always after the first policy year. Table 4 indicates the lapse rates by policy duration. Lapses are extremely high at 73% in policy year two. Lapses decrease steadily as the policy ages, even after ten years. After 13 years, the experience becomes more similar to first and second policy duration results typically seen. The interesting observation is that the longer a person has a policy, for whatever the reason, they do increasingly tend to hold onto their policy regardless of rate increases or changes in administrators.

TABLE 4
STRESSED LAPSATION
BY POLICY DURATION

Duration	Lapse Rate
1	—
2	73%
3	49
4	42
5	37
6	35
7	34
8	30
9	30
10	26
11	21
12	21
13	15

Table 5 presents lapse rates by gender to determine whether there is any difference between males and females. There is a difference. Male policyholders tend to lapse more frequently than females. I believe something happens here that we all would probably anticipate would happen. As policy duration gets longer, the proportion of females covered increases due to deaths amongst the males. That typically leaves the female behind. There seems to be a pretty consistent pattern. Women continue to pay better, and in a relative sense, and longer than male counterparts.

Table 6 presents lapse rates by issue age grouping. In Peggy's presentation, you will see some comments about differences by issue age around the same central ages of

57, 67, and 77. Most of the experience was on issue ages over 70. People who purchase at younger ages do have smaller lapses and thus greater persistency. Pat showed you that same phenomenon from the Intercompany Study. The greatest lapse clearly occurs at the older ages.

TABLE 5
STRESSED LAPSATION
BY GENDER

Duration	Male	Female
1	—	—
2	76%	72%
3	51	48
4	39	44
5	41	35
6	42	33
7	36	33
8	31	29
9	33	26
10	25	24
11	17	23
12	0	22
13	0	0

TABLE 6
STRESSED LAPSATION BY ISSUE AGE

Duration	Total	57	67	77
1	—	—	—	—
2	73%	100%	63%	75%
3	49	29	54	50
4	42	38	37	51
5	37	20	30	41
6	35	28	30	41
7	34	8	29	37
8	30	67	24	34
9	30	0	31	30
10	26	0	13	37
11	21	67	0	25
12	21	—	17	21
13	15	—	22	12

Table 7 shows the results by elimination period. The first Intercompany Study released in January 1995 and the more recent results presented by Pat verify a difference by elimination period.

Regardless of morbidity, mortality, or persistency, the worse lapse experience is found continually in policies sold with no elimination period. This stressed block

continues to show generally lower lapsation for all other elimination period plans but not by much.

TABLE 7
STRESSED LAPSATION
BY ELIMINATION PERIOD

Duration	0 Day	All Others
1	—	—
2	74%	70%
3	49	47
4	42	42
5	36	36
6	36	31
7	33	37
8	30	28
9	30	28
10	27	0
11	21	—
12	21	—
13	15	—

Our best guess, looking at the data from all the studies, is that zero-day elimination business is heavily sold by senior specialists and senior brokers and less by career agents. The two blocks I am discussing were sold by brokers. Maybe the results for this block are closer because the variable by sales force may be eliminated in this study.

Table 8 presents a new slant comparing nonstressed experience with stressed experience. It shows the lapse experience by issue year of sales for nonstressed business in our files compared to the stressed block we have been discussing.

TABLE 8
NONSTRESSED LAPSATION
BY POLICY DURATION & ISSUE YEAR

Duration	1986–90	1991– 94	Stressed
1	28%	15%	—
2	19	9	73%
3	14	10	49
4	12	11	42
5	13	—	37
6	11	—	35
7	11	—	34
8	6	—	30
9	4	—	30

Remember from Pat's presentation how for each year closer to the present day, the higher the persistency experience gets. For presentation, we separated the

experience into two segments. One segment is for issue years from 1986 to 1990, during which there was a preponderance of policy issues and a lot of changes in product offerings by new carriers. The second segment is from 1991 to 1994 where we are into the more modern era of products. What I wanted to demonstrate was the results for some business that we've taken over where the company may have gotten out of the business, but there were no rate increases associated with the business. On the far right-hand side of Table 8 the numbers are repeated for the stressed blocks. The other two columns are the nonstressed results. In a way, we may obtain a sense for what rate increases do to a block of business. It would appear that possibly new administrators may not have an enormous impact on persistency results. The 1991–94 results are very similar to the results that are found in the SOA Intercompany study.

Ms. Peggy L. Hauser: As Gary mentioned earlier, I will talk about the impact of persistency rates on pricing (that is, how different lapse rates will affect premium rates, and if you price with one set of lapse rates, what might happen if those lapse rates don't actually materialize.) To show these impacts I performed several sensitivity tests. First I tested three sets of lapse rate scenarios, a high, a medium, and a low, based on results from the Intercompany Study and what I have observed companies use in pricing. I also tested the impact of lapse rates assumptions on premium rates for inflation benefits. Finally I tested to see which lapse rates caused differences. For example, do differences occur due to the lapse rates in the initial years, or is it being caused by the ultimate lapse rate?

The first testing is with the high, medium, and low lapse rates. These assumptions are shown in Table 9. The high set of lapse rates start off at 25% in the first policy year and grades down to an ultimate rate of 12%. These assumptions represent the highest set of rates that I've seen a company actually use in pricing. They may not be the highest, but they were the highest that I had found. The medium set of lapse rates are consistent with what the Intercompany Study produced. Finally, the low set of lapse rates which start out at 9% and grade down to an ultimate of 3%, are fairly consistent in the early durations with the intercompany results for the first quartile of companies, in the more recent study. The lapse rates represent policy lapses versus premium lapse. These rates are for lapse only. When I did the sensitivity testing, I added in deaths, and I used the 1980 basic table.

TABLE 9
LAPSE RATES

Duration	High	Medium	Low
1	25%	14%	9%
2	20	12	7
3	17	10	5
4	14	8	4
5	13	6	3
6+	12	5	3

The 3% ultimate lapse rate assumption is lower than the results produced from the first quartile of companies in the intercompany study. However, this ultimate rate represents the lowest lapse rate that I have seen companies using in actual practice. For simplicity in my testing, I did not vary the lapse rate assumptions by issue age, by elimination period, or by gender. I wouldn't recommend doing this because it is apparent, from Pat's presentation of the Intercompany Study results that lapse rates may vary by those variables. I'll reiterate that these are the lapse assumptions for all issue ages. Table 10 shows what happens to the actual premiums. It shows that at the youngest issue age, age 57, the premium needs to be 15% higher if the lower set of lapse rates is used.

TABLE 10
RATIO OF PREMIUMS
TO MEDIUM LAPSE SCENARIO

Issue Age	Lapse Scenario		
	High	Medium	Low
57	0.77	1.00	1.15
67	0.81	1.00	1.10
77	0.93	1.00	1.04

From the Floor: What are your pricing goals?

Ms. Hauser: I priced for a consistent internal rate of return. I should caveat that you might not get the same results at your company using your assumptions. The results of this sensitivity testing will vary considerably depending on the profit objective. If you're pricing on a pretax profit versus an internal rate of return, there will be a significant difference in results. Furthermore, if you're pricing for an internal rate of return, results will vary depending on surplus requirements and expense structure.

I priced for a consistent internal rate of return, using industry average expenses split into first year and renewal expenses. I did not change any other assumptions between these tests. Perhaps the company that filed their actuarial memorandum

with an ultimate lapse rate of 12%, reflected cumulative antiselection in their pricing morbidity assumptions.

In other words, they may have anticipated that the high level of lapses would tend to be from healthier people and they would be left with an ultimate morbidity higher than a company pricing with the lower set of lapse rates. I did not adjust for cumulative antiselection. Therefore, these results may be the worst case scenario of what happens if you use high lapses but don't recognize any cumulative anti-selection. If I had recognized cumulative anti-selection, these ratios would be closer to one.

Next, rather than calculate premium, I tested the profitability of the premiums generated from the high lapse scenario. Initially, I priced to a target internal rate of return of 12%. Table 11 shows what happens if you price with the high lapses but actual experience comes in at either the medium level or the low level of lapse. As you would expect, your profits and internal rates of return drop dramatically. At the youngest issue age, if you priced with the high lapse rates and you experience the low lapse rates, the company will lose money on a pretax profit basis. Results can be fairly significant.

TABLE 11
IMPACT ON PROFITABILITY USING HIGH LAPSE SCENARIO PREMIUMS

Issue Age	Internal Rates of Return—12% Target			Pretax Profit as a Percentage of Premium		
	High	Medium	Low	High	Medium	Low
57	12%	6%	4%	21%	7%	(4%)
67	12	5	3	16	2	(6)
77	12	7	5	9	5	2

Next I tested the impact of lapses on pricing for a compound inflation benefit. I calculated premiums with a 5% compound inflation benefit, compounded annually for the life of the policy. Then, I calculated the ratio of a base plan plus premium inflation to the base plan premium. These ratios are shown in Table 12. I did not change any other assumptions. Therefore, I used the same set of lapse rates, the same set of expense assumptions and the same internal rate of return. Table 12 shows that at the younger ages, the lapse rate has a significant impact on the premium that's required to fund the inflation benefit. The difference isn't quite as significant at issue age 77. However, it would be very dangerous to use the high set of lapses and experience the low set of lapses at issue age 57.

TABLE 12
5% COMPOUND INFLATION BENEFIT
PREMIUM LOADS

Issue Age	High	Medium	Low
57	2.16	2.74	3.00
67	1.80	2.04	2.14
77	1.42	1.52	1.57

Next I did some testing to determine the cause of the large premium differences produced under the three lapse rate scenarios. Are they driven by the lapse rates in the initial years or by the ultimate lapse assumptions? Table 13 shows the medium set of lapse rates for durations three and later, and the variation in the lapse rates for years one and two. Values at the bottom of Table 13 show the proportion of lives entering policy year three given lapses in the initial two years. Lapse rates in the first two produce a difference of 21% between the low lapse rate scenario and the high lapse rate scenario. Nevertheless, results show that this difference does not have much of an impact on the premium. My initial low lapse rate scenario had started off with a 9% first year and a 7% second year. It would not be realistic in this test to start with nine, seven, and then go up to ten. So in this testing, I used 10–10.

TABLE 13
VARY LAPSE RATES IN INITIAL TWO YEARS ONLY

Duration	High	Medium	Low
1	25%	14%	10%
2	20	12	10
3	10	10	10
4	8	8	8
5	6	6	6
6+	5	5	5
Percentage starting policy year 3	59%	74%	80%

Table 14 shows that the initial year lapse rates really did not have a big impact on premium. We might have expected that the premiums for the high lapse rate scenario would increase since we've lost a lot of people and may not be able to recoup as much of the acquisition expense. Age 57 shows a 1% increase in the required premium which is hardly significant. I would have expected initial year lapse rates to have a bigger impact.

TABLE 14
RATIO OF PREMIUMS

	Initial Two-Year Lapse Scenario		
Issue Age	High	Medium	Low
57	1.01	1.00	1.00
67	1.00	1.00	1.00
77	1.00	1.00	1.00

Finally I tested what happens if I use the medium scenario for the first two policy years, but then vary the ultimate lapse rate. The results look very similar to the results produced by varying lapse rates in all years (Tables 15 and 16).

TABLE 15
VARY LAPSE RATES IN YEARS 3 AND LATER

Duration	High	Medium	Low
1	14%	14%	14%
2	12	12	12
3	12	10	5
4	12	8	4
5	12	6	3
6+	12	5	3

TABLE 16
RATIO OF PREMIUMS

	Ultimate Lapse Rate Scenario		
Issue Age	High	Medium	Low
57	0.76	1.00	1.15
67	0.82	1.00	1.09
77	0.93	1.00	1.04

In conclusion, since we really don't know, at this point, what the ultimate lapse rate will be on these policies and the ultimate rates have the greatest impact on profitability, it seems these assumptions warrant serious consideration in pricing. The industry has made great strides with the Intercompany Study. But, as Pat mentioned in her presentation, there are still some factors in the study that might cause the resulting lapse rates from the study to be high.

Furthermore, even if we have a handle on the lapse rates in the first two years, since we have more credibility and more exposure in the first couple years of the study, those years aren't having that great of an impact on premiums and profitability as the rates in ultimate years. I found this sensitivity testing very interesting.

From the Floor: What is the source of your assumptions?

Ms. Hauser: I reviewed data we had collected in-house from various clients and other actuarial memorandums. I tried to choose per policy expense assumptions that would be middle of the road.

From the Floor: What is your feeling as to the impact on persistency due to different types of nonforfeiture benefits?

Ms. Hauser: I haven't done a lot of sensitivity testing of the impact of lapse rates or nonforfeiture benefits. There are a couple of things to consider. When we are pricing a nonforfeiture benefit, we will typically slow down the lapse rates just prior to when the nonforfeiture benefit is available, and then use slightly higher lapse rates thereafter. I haven't done sensitivity testing to know if that would bring these results closer together.

From the Floor: You need to use a low lapse rate in pricing because I can say from experience it can be as low as 50% of those lapse rates you've used. Can you suggest what companies do to be competitive when they have very low lapse rates?

Ms. Hauser: If you want to have competitive premiums and you have experienced low lapse rates, you may have to either lower your profit objective, cut your expenses, or reduce your morbidity perhaps by improving underwriting. You must internally determine how you can make the equation work. A couple ways to reduce morbidity would be to make sure you are adjudicating claims as well as possible and doing a good job of underwriting.

Mr. David W. Simbro: I think some of those assumptions you've shown on company expense is information that may be good up to duration six or duration seven. I know in our other lines of business we do have fairly low lapse rates, but they definitely don't bottom out at duration six or duration seven. At our company it flattens out around duration ten. I'm wondering if companies are finding that, or are they assuming fairly flat lapse rates after duration six or duration seven?

Ms. Hauser: What I have seen is that companies typically bottom out the lapse rate. Some might go out a little bit longer to maybe duration ten. Typically the mortality is added to the lapse, but I haven't seen a lot of any variation in the ultimate lapse rate beyond duration ten.

Mr. Corliss: The pricing memos we've reviewed for reinsurance purposes are fairly consistent and I can't think of one that doesn't flatten out by duration six.

Ms. Hauser: By the time you're at the tenth duration with some of these policies, you may be ready to make an experience change. At that point, whether the ultimate starts at duration 10, 11, or 15 may not matter.

From the Floor: When repricing, shouldn't you look at the impact of what you assumed during original pricing?

Ms. Hauser: No, I didn't mean that. I meant by the time you get a policy that's in the tenth duration, you may be testing that class of policies to make a change. You would be at the ultimate rates. At durations, six, seven, and eight, you are probably getting close to your ultimate rate.

Mr. Douglas S. Van Dam: I've also seen a block of business that had a 40% rate increase and the morbidity improved afterwards. I wasn't sure why that occurred. It seemed as if there was a great deal of anti-selection originally, but I don't know how real it is. Have you seen other blocks upon which you could make some comments?

Mr. Corliss: You've given me an opening into an area that's a little away from our topic, which is persistency. I think it does reflect why there can be some improvement after rate increases. Even without rate increases, we have seen poor blocks demonstrate an improvement.

The answers probably get back to the profitability of a long-term-care block of business. The first item is underwriting. The second is the claim processes within a company. Third, I believe pricing is an important activity item. Underwriting seems to be such a key. We've been through about a ten-year period of time in which underwriting knowledge has changed dramatically.

I think that blocks that are showing improvement in later policy years are a result of obvious anti-selection that took place originally. The anti-selection results occurred early and have been recorded. Those insured that are still covered are really a more typical set of policyholders with a more average expectation of result. That's why I believe we have seen claim results improving by policy duration with or without a rate increase.

Ms. Hauser: I have had a chance to look at a block that was having some significant rate increases, and we had not seen that phenomenon occur. We saw erratic experience after the rate increases had been going in and it looked more like the experience was worsening than getting better.

Mr. Roger J. Gagne: I have a couple of questions for Pat. First, was the experience used for the study all on individual, or was there group experience at all in there? The second question is, I've seen some differences in our experience, on the group side. Different steps were taken to conserve upon cessation of premiums; there are different steps you can take to see the insured really meant to do that, or was it an unintended lapsation, such as having a the second party to call. Was there any attempt to look at differences between the submitting companies on their policies in that regard, or does any of the panel have any comments on observed differences?

Ms. Fay: The study did include both group and individual, but clearly there is much more individual weighting there. We haven't tried to look at anything in particular to see what a company might do to control lapses.

Mr. Corliss: This more recent persistency experience does have more group business than the last one did. However, the study dated January 1995 had less than 1% of exposure as group business. This information is predominantly based on individual policyholders.

Ms. Kim H. Tillmann: I have a question about the experience study. I'm wondering if there was a purpose for studying lapsation. My first reaction was, well, that must be different for every company. I'm thinking about uses that an Intercompany Study may have and whether there was a specific purpose in mind for studying this.

Mr. Corliss: There was a very specific request from some companies who contributed data to the study which is generally unrelated to what most actuaries do. There was a lot of debate, discussion, and testimony going on around the country and in Washington about horrible lapse rates. The summation indicated the insurance industry was not doing its job with its products.

The only people who were out of the process were the agents and people who were lapsing their policies shortly after they got them because they bought them under our high pressure. We were requested to see if we could provide information to show that people do hold onto their policies. The various breakouts of information were completed to show results over time.

We knew that there were a number of things going on in that first five-year period, 1984–89. New policies were coming out regularly, and new companies coming into the business, so there was a lot of lapsation that was due to the fact that new and better programs and stronger companies were in the business. I think the information has demonstrated that the industry is coming into its own.

CHART 1
1984-91 INTERCOMPANY EXPERIENCE STUDY
LAPSE RATE BY DURATION

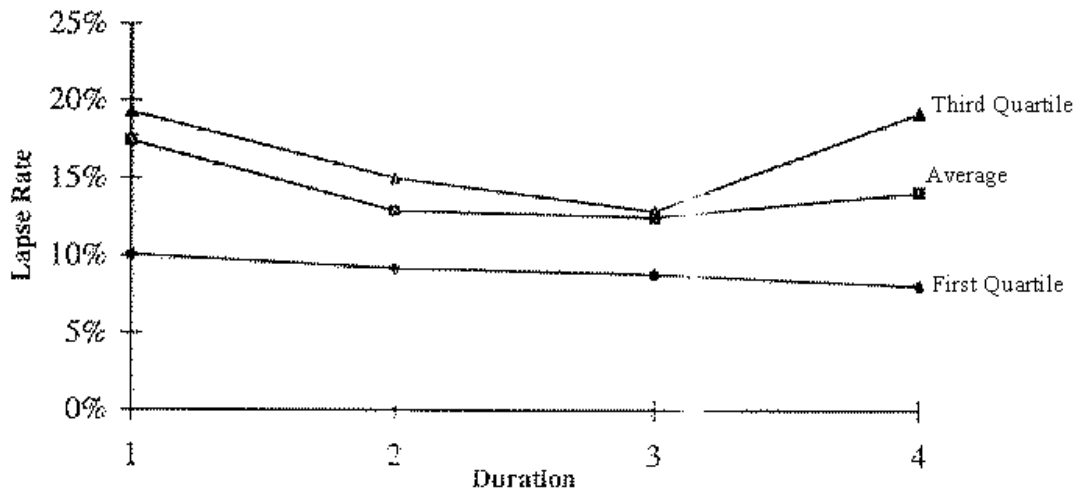


CHART 2
1986-1993 INTERCOMPANY EXPERIENCE STUDY
LAPSE RATE BY DURATION

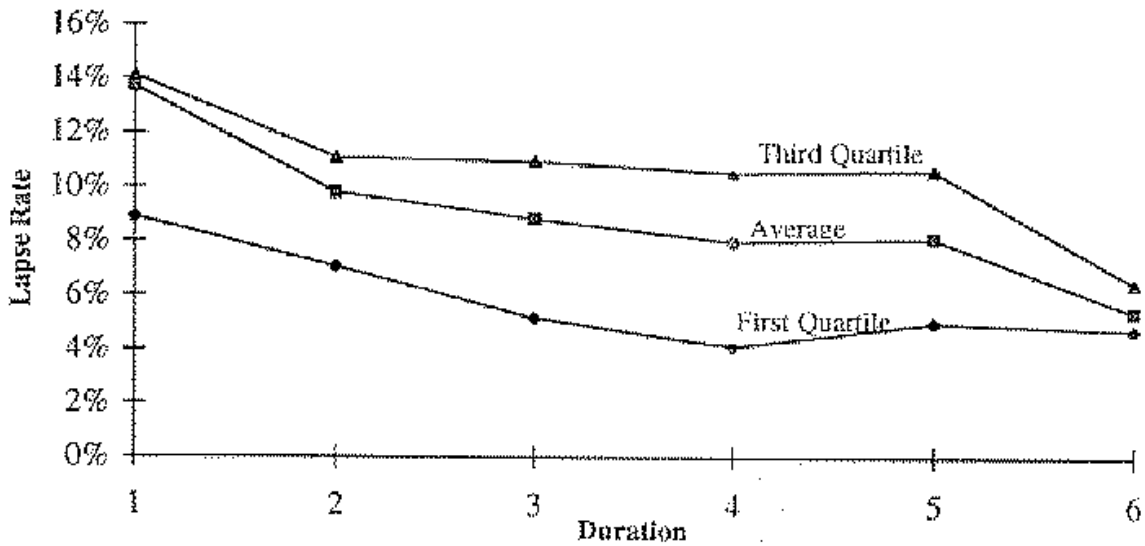


CHART 3
1986-1993 INTERCOMPANY EXPERIENCE STUDY
LAPSE RATES BY ISSUE YEAR

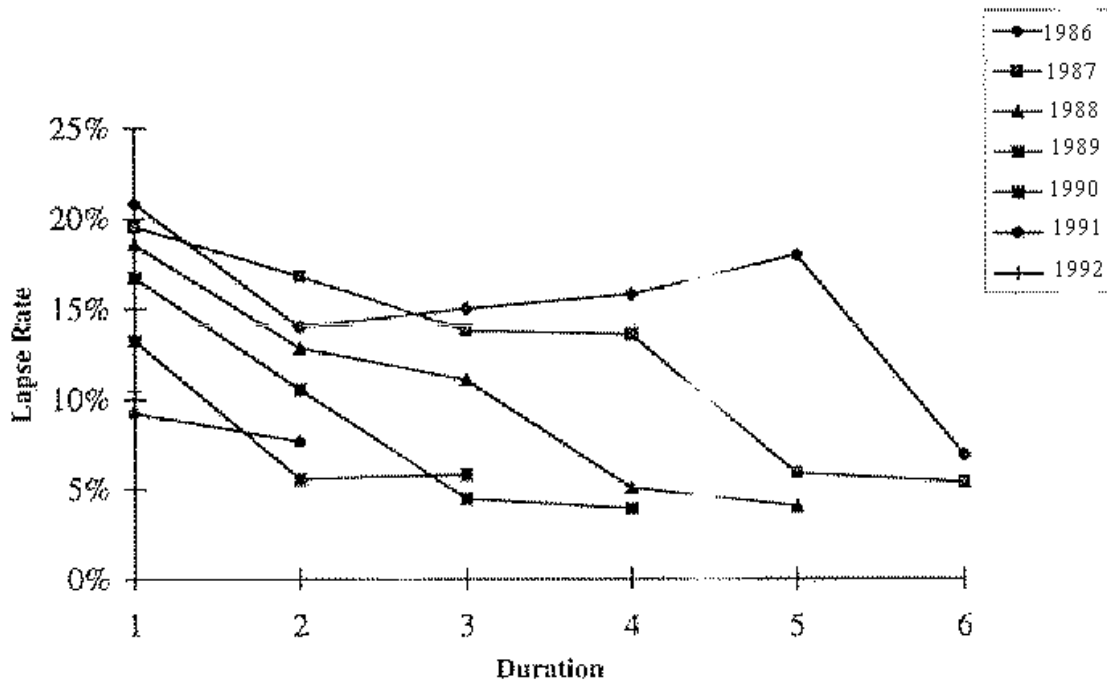


CHART 4
1984-1991 INTERCOMPANY EXPERIENCE STUDY
LAPSE RATE BY ISSUE AGE

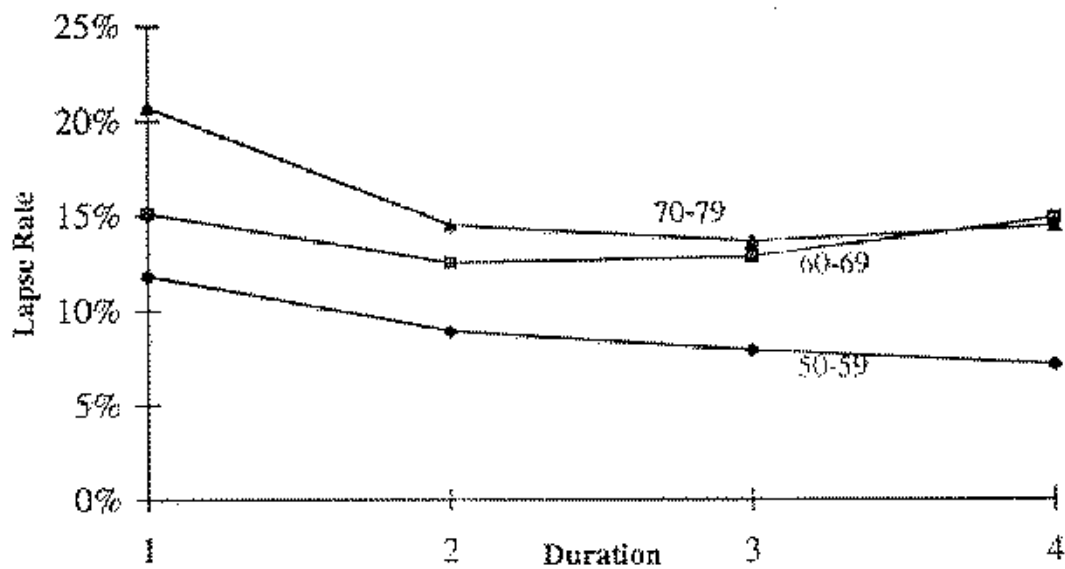


CHART 5
1986-1993 INTERCOMPANY EXPERIENCE STUDY
LAPSE RATE BY ISSUE AGE

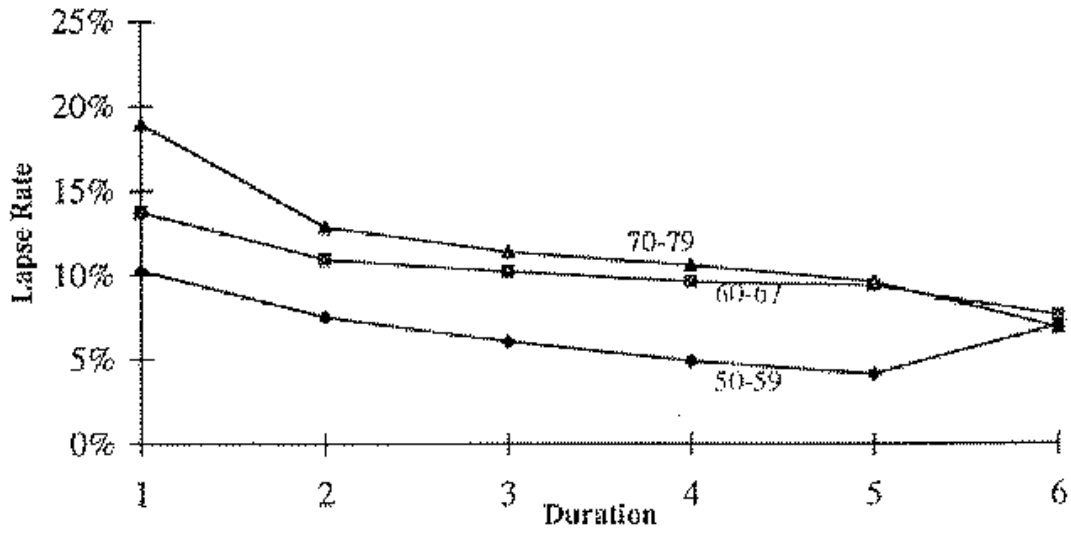


CHART 6
1984-1991 INTERCOMPANY EXPERIENCE STUDY
LAPSE RATE BY ELIMINATION PERIOD

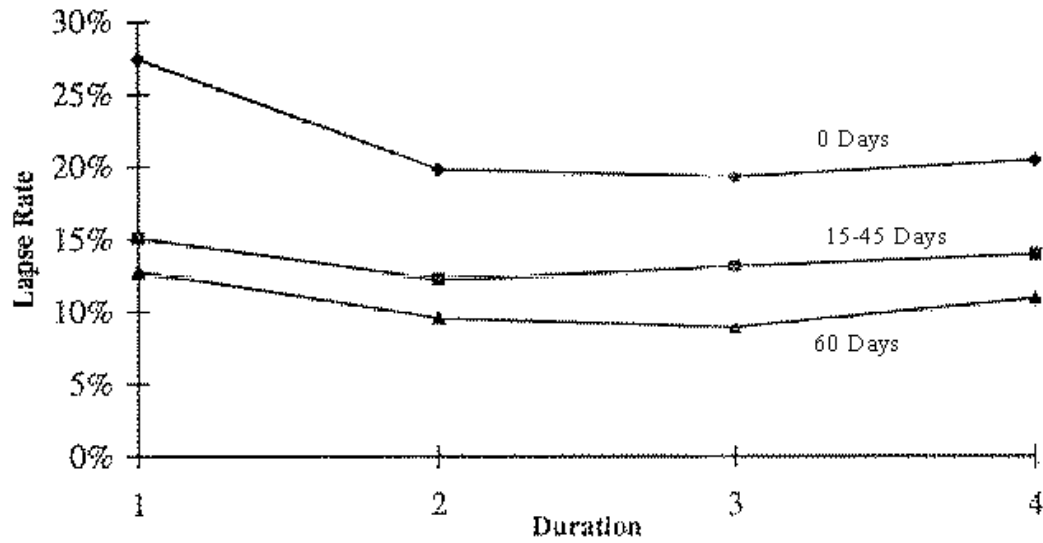


CHART 7
1986-1993 INTERCOMPANY STUDY
LAPSE RATE BY ELIMINATION PERIOD

