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Successful Marketing and Selling to Baby-Boomer-and-Older Customers

Twelve Recent Brain Research Discoveries Having Relevance to Successful Communications

By James J. Gilmartin

Introduction

It's only in the last decade that most of the literature has been written on how the brain functions and how we process communications. Because consumer reactions to marketing communications will depend on the manner in which they're processed, an understanding of how the brain processes information can be very useful. Information processing refers to the process by which a stimulus is received, interpreted, stored in memory and later retrieved.

An appreciation of information-processing principles and findings can yield some important lessons for those interested in influencing consumer behavior. Although marketing communications is perhaps the greatest beneficiary of what we know about how people process information, these lessons can be applied to many other areas including personal selling, package design, branding and training of salespeople.

What follows are recent findings of brain research having relevance to marketing and sales to boomer-plus customers. Author David B. Wolfe, a noted expert on developmental relationship marketing contributed much to the findings discussed.

Findings

1) There are material differences between males and females in the architecture and functioning of their brains. This often leads to different responses to the same experiences. Females generally make greater use of right brain functions in thinking processes, making them more subject to emotional arousal than males. However, research indicates that in later life, the gap between males and females in emotional sensitivity narrows. Males become more intuitive and depend more than they did earlier in life on emotional reads of a situation to determine if it warrants further attention.

MARKETING IMPLICATION: Logic in product messages generally works better with males than females. However, this doesn't mean qualitative differences in accuracy of perceptions because females generally make more effective use of intuition, a right brain, emotionally based function. However, once a female experiences a favor-

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This newsletter is free to section members. To join the section, SOA members and non-members can locate a membership form on the LTCI Web page at *www.soaltci.org*. Back issues of section newsletters have been placed in the SOA library and on the SOA Web site (*www.soa.org*).

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A Word From the Editor

by Bruce Stahl

Editor
Bruce Stahl

Decisions, decisions, decisions. As a good chess player considers the opponent's movements in advance, so we will do well to consider our clients' thoughts and emotions in advance. No matter what role we play in the long-term care insurance arena, we want to be able to recognize and help direct our clients' thoughts and emotions toward favorable decisions.

In our present rate stabilization environment where premium rates have increased to levels that seem less affordable to many in the individual market, Jim Gilmartin offers some interesting considerations in his article on successful marketing. Connecting marketing techniques to mental processing activities, he identifies how the client is processing information so that the salesman can walk through the components of each sales presentation culminating with the client deciding to buy.

The policyholder continues to make decisions regarding his long-term care insurance policy after his initial purchase. In his article on adverse selection from voluntary lapses, John Timmerberg identifies a few situations in which the policyholder is once again confronted with a decision to protect his family from the consequences of his requiring long-term care. The agent knows that these policyholder decisions impact his commissions, yet they also significantly alter the relationship between expected premium income and claim expenses.

These subsequent-to-purchase policyholder decisions are not all equal. The nature of the original sale, the policyholder's previous decisions, his environment and his health status all influence the direction of the subsequent decisions. I discuss these in my article on persistency, in order to demonstrate that there is value in recognizing these decision differences. The value is in successfully planning for the future. ❋

Chairperson's Corner

by James M. Glickman

Welcome to this LTCI section newsletter, my last as your Section Chairperson for 2004.

During the past five years, the LTCI Section has progressed from just a good idea, to one of the most active sections in the SOA. In fact, with our attempts this year to expand membership beyond actuaries, we have taken the first step toward making this section the educational and informational location of choice for the LTCI industry. Our annual intercompany conference (the fifth edition of which is being held at the Rosen Centre hotel in Orlando, January 23-26, 2005) has more than doubled in size from just over 300 attendees to more than 700 attendees in its first four years. This conference is now recognized by the LTCI industry as the conference to attend, if you can only attend one.

Last October, I set three primary goals for the section to accomplish during my year as chairperson:

- Increase LTCI Section membership more than any other section with an emphasis on increasing the number and participation level of the non-actuarial members.
- Make the LTCI Section Web site an indispensable tool for everyone in the LTCI industry with more "hits" than any other section Web site.
- Start the process of making the LTCI Section the resource of choice for political, educational and research questions regarding LTCI and the LTCI industry.

Goal number one is a work in progress. During the past 12 months, our section membership has increased by 15.5 percent, which was the largest growth rate in section memberships among the 17 sections. In addition, our non-actuarial membership is now over 25 percent and growing. By this time next year, it should exceed 40 percent.

Goal number two has moved a little more slowly, but has shown much progress. We have a totally redesigned Web site with information organized along eight different tracks (Actuarial, Claims, Compliance, Group, Management, Marketing, Operations and Underwriting). In addition, we now have our own Web site: *www.SOALTCI.org* that goes directly to the LTCI Section Web pages, bypassing the rest of the SOA site. However, there is still much work to be accomplished to make this site an indispensable tool for the LTCI industry. I strongly encourage anyone with interest to contact me or anyone else on the council to volunteer in this effort.

Goal number three has made the least progress of the three goals, although some significant progress has been made there as well. During the past year, both the IAA (International Actuarial Association) and the Managing Retirement Assets Symposium have requested and received assistance with projects involving LTCI. Over time, as more organizations become aware of the LTCI Section, more will be accomplished toward meeting this goal.

In order to continue moving forward on each of these goals, as well as to establish and implement additional ones, we will need your help. Please contact the section if you are willing to participate in these activities.

Finally, I would like to thank the many people whose volunteer help made this year a successful one for our section. With all the changes occurring in the LTCI industry, the work of this section in the next few years will become even more important. ❋

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able insight, she may become as rational in further processing of a matter as a male. It's just that her right brain is a more formidable gatekeeper to the left brain than male brains generally are.

2) Motivations do not originate in the conscious mind. The conscious mind is the executive officer that, like a corporate CEO, makes decisions on needs that have been framed at lower levels. Neurologist Richard Restak states in *The Brain Has a Mind of Its Own,* "We have reason to doubt that full awareness of our motives may be possible." Adds brain researcher Bernard Baars in *In the Theater of the Brain*, "Our inability to report intentions and expectations simply reflect the fact that they are not qualitatively conscious."

Creators of product messages need to become more intimately familiar than is typical with the "hidden drivers" of consumers' behavior than consumers, about which they have little explicit knowledge.

MARKETING IMPLICATION: Answers consumers give researchers about their motivations are often incomplete or off the mark simply because people can only speculate about their motivations at deepest levels of the psyche. Creators of product messages need to become more intimately familiar than is typical with the "hidden drivers" of consumers' behavior than consumers, about which they have little explicit knowledge. These drivers tend to be stage-of-life specific. For example, young people generally have stronger outer-directed motivations relating to social status than older people. Older people's motivations tend to be qualitatively more experiential and less materialistic than younger people's motivations.

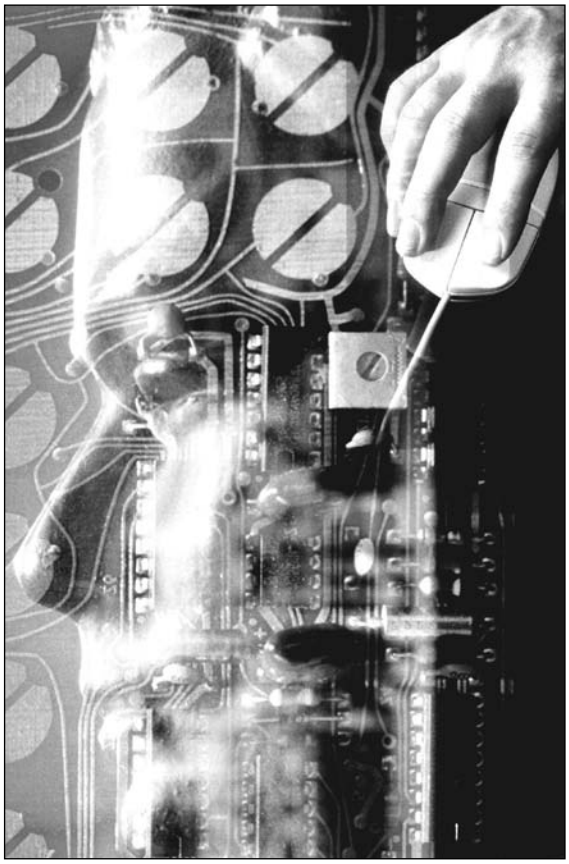
3) People use different brain sites and mental processes in answering researchers' hypothetical questions than they use in real-life situations. Research respondents tend to draw more heavily on the objective sequential reasoning of the left brain than on the subjective emotional right brain in answering researchers' questions. This bias is reversed in favor of the right brain in reacting to product messages and making buying decisions.

MARKETING IMPLICATION: Research results can be improved by techniques that are more effective in divining consumers' implicit testimonies that have not been distorted by undue influence from left-brain processing. The recent trend toward studying consumers in their natural living and shopping environments is justified by the finding that people process hypothetical information differently than they do real-life information. Researchers need to make more use of indirect techniques to get behind the curtains of consciousness.

4) Brain development is lifelong. How people mentally process information changes from one decade of life to the next. This alters how people view and connect with the external world (worldview). Language style preferences also change over time. For example, youth and young adults generally have a more assertive language style than older people.

MARKETING IMPLICATION: Product messages will be more effective when expressed in the stage-of-life language style of the core market to which a message is primarily addressed.

5) Adolescent brains are significantly inferior to adult brains in reading facial expressions. The older people are, the more skilled they generally are at reading facial expressions.



MARKETING IMPLICATION: Product messages depicting people should reflect awareness of the core audience's ability to read facial expressions. For instance, older people's greater sensitivity to facial expressions means that facial expressions should bear authentic connection to the product and product message in older markets. Younger consumers will generally be more concerned with what people are doing than with what their faces are saying.

6) As midlife (40+) approaches, people increasingly draw on right-brain functions. They begin relying less on left-brain sequential reasoning and more on emotions—aka "gut feelings" or intuition.

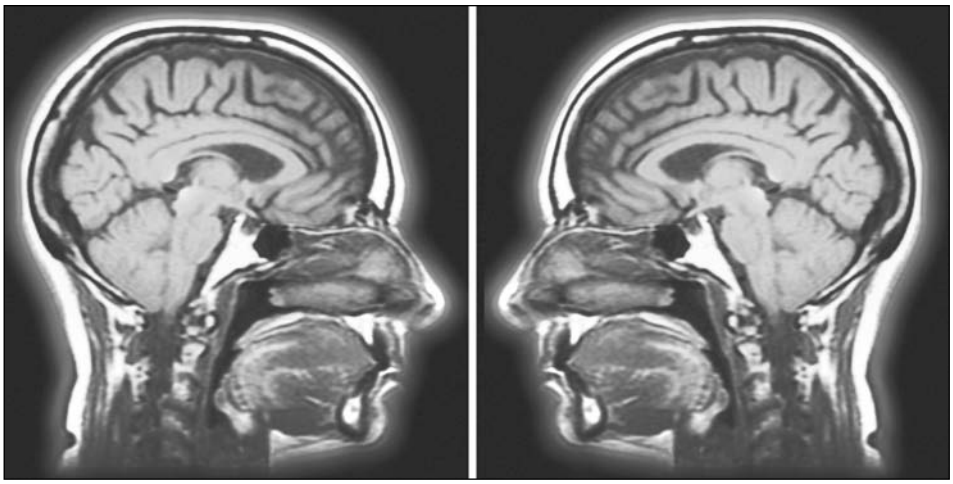
MARKETING IMPLICATION: Product messages for people over 35 should have more affect (emotional toning) than product messages for younger people. Under 35, people tend to have a stronger reasoning bias, thus product messages generally should implicitly or explicitly promote concrete reasons for purchase.

7) Information entering the brain's cortex (outer layers) is first processed mostly in the right brain. The right brain processes information as sensory images rather than as words and numbers. The left brain works in numbers and words.

MARKETING IMPLICATION: To arouse the strongest attention, product messages should be rich in sensory stimuli. Even though the right brain can't process words, words can create sensory images, as every storyteller knows. The older a market, the more important it is to present a product in story form.

8) Emotion, not reason, is the final arbiter in decision-making. Initial responses to information entering the brain are visceral. Changes in body states (e.g., pulse, hormonal flow, saliva flow, body temperature, etc.) generate emotions. When a matter fails to generate emotions, a person will not take action on it. (Brain patients who have lost their emotional abilities while retaining full powers of comprehension and reasoning cannot make advantageous decisions in which they have a personal stake in the outcome.)

MARKETING IMPLICATION: A cardinal rule for developing effective product messages is go with the grain of the brain or "Lead with the right; follow with the left." The only way to get into a person's conscious mind is via the right brain. Again, sensory images are keys to getting into the right brain.



9) Gender tends to predispose responses to voice-overs in broadcast advertising. For example, male voices are seen as more knowledgeable when describing technical attributes of a product, while female voices are seen as more knowledgeable when describing a product with references to love, relationships and caring.

MARKETING IMPLICATION: Choose the voice to match the content and delivery style of a product message.

10) Pictures of people in motion arouse the brain more quickly than posed pictures.

MARKETING IMPLICATION: Avoid posed pictures like the plague. Motion conveys vitality. Posed pictures convey lifelessness. Posed pictures should be all but totally avoided in marketing to older adults, although marketers commonly use posed pictures for that market.

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11) Each experience we have prompts the brain to create clusters of neurons (brain cells) with predisposed responses to new but similar experiences. As the population of these dispositional clusters increases, a person becomes more habituated and reflexive in his or her responses. This decreases sensitivity to external influences, like advertising, making a person more autonomous.

MARKETING IMPLICATIONS: Dispositional clusters are the marketer's equivalent of "hot buttons." The older we are the more hot buttons we have. This is good news and bad news for marketers. First the bad news: It's harder to change people's patterns after the early adult years. Now, the good news: When a marketer hits a consumer's hot buttons, the deal is all but made. The challenge is learning what those hot buttons are. Fortunately, there is remarkable consistency in the general nature of hot buttons among people in the same season of life. Knowledge of the developmental attributes of consumers in a given season will guide a marketer in making contact with their hot buttons.

12) Initial determination of information relevance occurs unconsciously. When a person sees an ad, the right brain initially determines if the ad has personal relevance. The sequential reasoning processes of the left brain only go to work on the ad after it has reached consciousness. The right brain conducts a process called information triage to reduce information flow to levels the conscious mind, with limited working memory (RAM) can handle. The primary criterion is relevance to a person's interests.

MARKETING IMPLICATION: Imagine having a conversation in your office or at a social gathering when you hear your name come up in another conversation not far from you. Your brain was hearing the other conversation all along, but only when your name was mentioned did it see fit to alert your conscious mind to the other conversation. That's what information triage is about. Creating product messages that survive information triage is the biggest challenge in marketing. It has become fashionable to complain about advertising clutter. However, the clutter problem is in the brain, not on a television screen or in a magazine. When a message has relevance to a person's interest, the right brain will take note. When we talk about having a "double take," we acknowledge the right brain's ability to pick up in a nanosecond something that has relevance to our interests.

Don't Muddle the Message

Marketing and sales professionals often pay little attention to how the consumer thinks and processes information. Research has shown that the right hemisphere of the brain processes emotional information and the left processes logical information such as product demonstrations. This knowledge can help to avoid blunders that might turn interest into disinterest.

Communications that evoke emotional responses typically produce a high level of processing activity in the right hemisphere. Unfortunately, many communications that draw the viewer, listener or reader into an emotional scene abruptly or quickly cut to product information. Deep inside the brain, this action causes trouble. The right hemisphere is still highly active, making it difficult for the brain to process words (the brain only processes images). In short, the timing can muddle the message. ❋

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The Upside to Higher Persistency in LTC Insurance—Effects of Anti-Selection After Policy Issue

By John L. Timmerberg

A lower level of voluntary lapses—or higher persistency—is a topic of interest or concern for long term care insurance (LTCI) profitability and pricing. The pricing of LTCI is lapse-supported, meaning that voluntary lapse rates below expectations can lead to profit concerns. But the flip side to high persistency is fewer opportunities for policyholder anti-selection against the company. Higher persistency should result in improvements in experience as measured by policy year loss ratios and attained age claim cost levels.

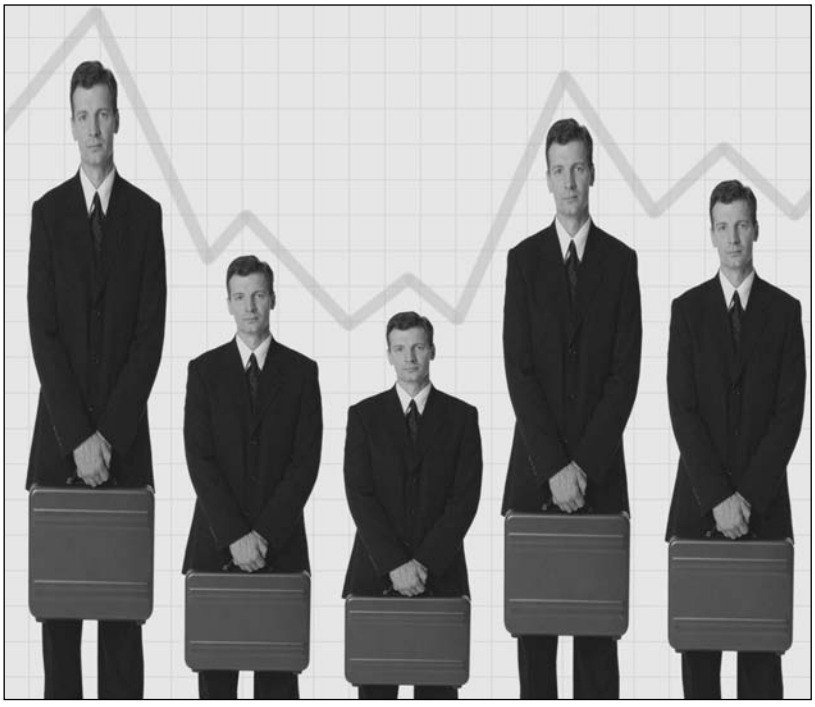
In this article, I discuss policyholder anti-selection (after issue), develop a fairly simple model to demonstrate the impact on attained age claim costs, and then compare results for three scenarios. Then I look at the variation in anti-selection between higher and lower levels of lapses and one scenario includes the impact of additional event-specific lapses. I demonstrate that when pricing products today in a lower lapse rate environment, actuaries may consider using favorable adjustments to their claim costs if using historical experience available from a higher lapse rate environment, all other factors held constant.

I credit William F. Bluhm's article "Cumulative Antiselection Theory," which is the foundation or inspiration for many of the ideas presented here.

Anti-selection in Action

When using the term anti-selection, I am referring to the ability and tendency of LTCI policyholders to make decisions regarding whether or not they will voluntarily lapse their policy that reflect their superior knowledge as to their health status and potential future claim utilization. Generally, policyholders who lapse may have made the personal prediction that their benefit utilization will be low. Therefore, lapses tend to remove the healthiest policyholders from the pool. This impacts the remaining pool, resulting in higher policy year loss ratios and higher attained age claim costs, as compared to the performance that would exist in the absence of these lapses.

For example, I suggest that a policyholder who purchased their policy seven or eight years ago, and has since experienced two falls or a diagnosis of emerging Alzheimer's disease and lives alone is much less likely to lapse their policy as compared to a policyholder who has few health concerns, remains active and lives with their spouse. In addition to the policyholder's knowledge regarding their current health status or potential future ADL (activity of daily living) deficiencies, benefit utilization could be impacted by the presence of a spouse, the presence of family nearby or other informal support services, relative accessibility of formal services, regional variations, the willingness of the policyholder to accept the services or benefits available under



their policy and other factors. It is possible that the presence of a spouse or other factors compete with health status as a primary indicator of future utilization. Although there are many factors that affect future benefit utilization, I will use the term "health status" to indicate the combination of all policyholder-specific factors that affect benefit utilization.

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The potential for policyholder anti-selection exists at each point during the life of a LTCI policy when a premium payment is due. The policyholder must decide whether or not they will pay the premium thus keeping the policy active, or not pay the premium and lapse the policy. And, if properly motivated, the policyholder may cancel the policy between premium payments. Special circumstances or events where one might expect additional event-specific lapses and policyholder anti-selection are as follows:

- a rate increase notification is received;
- the policyholder receives potentially unsettling news such as an insurance company ratings downgrade, sale, merger or exit from the LTC line of business;
- an increase in agent activity, with offers to replace policies with newer policies that may have higher benefit value per premium dollar;
- a communication regarding policyholder options as the result of a class action settlement, a regulatory intervention or some other unusual event that effects the policyholder's status; or
- a return of premium benefit (cash payable) matures and becomes payable.

The potential for policyholder anti-selection exists at each point during the life of a long-term care insurance policy when a premium payment is due.

In fact, additional policy lapses can occur at any point that the policyholder receives a communication reminding them that their policy exists and is still active.

The Model

To model the impact of anti-selection, I will discuss it in terms of the impact on the expected claim cost for one year. By claim cost, I am referring to the attained age claim costs which are measured as claims incurred per dollar of daily benefit amount exposed during the year, for a selected attained age. Attained age claims cost curves are used in both pricing and reserving (active life reserves) and increase rapidly with attained age, although with varying slopes depending on company experience and their interpretation of the data.

I start with the following equation for the year in which the lapse occurs:

$CC_k = (1.00\text{-}VLR_t)(HS_A)(CC_k) + (VLR_t)(HS_L)(CC_k)$,

with variables defined as follows:

VLR_t = voluntary lapse rate for policy duration t.
CC_k = claim cost for attained age k.
HS_A = average health status of continuing active policy for this year.
HS_L = average health status of lapsed policy for this year.

As motivation for the equation, please note that the potential benefit utilization is split into two parts: that for continuing policies and that which would have been contributed by policies that lapsed. By assuming some level of health status for the lapsed policies (HS_L) and using the appropriate voluntary lapse rate for duration t (VLR_t), we are able to calculate the health status for continuing active policies (HS_A) that brings the claim utilization total back into balance.

Assume $HS_L = 0.50$ and $VLR_t = 0.04$ and solve for HS_A, then ...

$1.00 = (1.00\text{-}0.04)(HS_A) + (0.04)(0.50)$

and $HS_A = 1.02083$, or 2.1 percent higher as a result of the lapses.

When assuming that $HS_L = 0.50$ in the calculation, we are indicating that the health status of the lapsed policy in the year that they lapse is one-half the overall expected rate of lapsed and continuing policies combined. We will call this a moderate level of health status differential. As another example, if $HS_L = 0.25$, that would indicate that the health status or expected benefit utilization rate of the lapsed policy is one fourth the overall expected rate of lapsed and continuing policies combined. We will call this a high level of health status differential.

The 2.1 percent increase calculated above is the impact of the anti-selection in the year of the lapse. In addition, we assume that the effect of this year's lapses continues to future years. In our examples, we assume that the effect continues but decreases 10 percent each year, running off within 10 years. As noted above, the difference in future claims is a reflection of a number of factors, some of which are quite stable and persistent. Thus, allowing the effect to run off over 10 years is reasonable. For each year, the cumulative impact of the anti-selection is the anti-selection for that year plus the multiplicative impact of prior years that are still running off. For example, in policy year three the effect includes the first year effect for policy year three, the second year effect from policy year two and the third year effect from policy year one.

Exhibit I

Policy Duration	Higher Lapse Rates No Events	Higher Lapse Rates Two Events	Lower Lapse Rates No Events
1	15.50%	15.50%	5.50%
2	9.50%	9.50%	4.00%
3	7.00%	7.00%	3.00%
4	5.00%	5.00%	2.50%
5	4.50%	8.50%	1.50%
6	4.50%	4.50%	1.50%
7	4.50%	8.50%	1.50%
8	4.50%	4.50%	1.50%
9	4.50%	4.50%	1.50%
10	4.50%	4.50%	1.50%
11+	4.50%	4.50%	1.50%

The Results

Exhibit I shows three voluntary lapse rate scenarios. "Higher Lapse Rates, No Events" is from a higher lapse rate era, possibly representative of LTCI policies issued in the early 1990s. Column two, "Higher Lapse Rates, Two Events" is from the same higher lapse rate era, but also includes two years where event-specific effects on the lapse rate increased it by 400 basis points each year (a premium rate increase in year five and an insurance company ratings downgrade in year seven, for example). Column three, "Lower Lapses, No Events" shows the expected lapse rate for policies being issued during a low lapse rate era, which could be reflective of today, and no events. Please see the "Long-Term Care Insurance Persistency Experience" joint study by the SOA and LIMRA for information on the differences in lapse rates over recent time periods.

Exhibit II shows the anti-selection impact of the lapse rate scenarios with some variation in the anti-selection intensity as measured by the differential in health status. The first column shows the cumulative anti-selection impact for the "Higher Lapses, No Events" scenario along with moderate health status differential ($HS_L = 0.50$). Column two shows the cumulative anti-selective impact of the "Higher Lapses, Two Events" lapse rates, along with high health status differential ($HS_L = 0.25$). Column three shows the cumulative anti-selective impact of the "Lower Lapses, No Events" scenario along with moderate health status differential ($HS_L = 0.50$). The values shown in the table are the percentage increase in the claim costs resulting from the anti-selection brought about by both the underlying level of voluntary lapses and the additional anti-selection produced by the lapses resulting from events.

Column two shows the highest results, with anti-selection peaking at duration seven at 35.8 percent and leveling off at 21.2 percent for all durations, 17 and above. The anti-selection impact peaks at the year of the second event, which increased lapses by 400 basis points in that year. Column three shows the lowest results, with anti-selection peaking at durations four and five at 6.5 percent and levels off at 4.3 percent at duration 13. Clearly, the impact of anti-selection can vary widely, depending on the level of lapses, additional lapses due to events and the health status differential assumed.

As a potentially useful application, one can consider the development of a claim cost curve as starting from a theoretical curve that could exist if there were zero voluntary lapses. This "baseline" claim cost curve would be the lowest claim cost curve with all other curves resulting from non-zero lapses being at higher levels, all other factors held constant. To estimate the "baseline" claim cost curve, we take the values resulting from our actual experience and then divide by the factors resulting from our model. For example, if we had statistically credible claim cost values from results experienced as described by the heading in

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...one can consider the development of a claim cost curve as starting from a theoretical curve that could exist if there were zero voluntary lapses.

column two of Exhibit II, then we could divide our actual values by these factors to get back to the "baseline" claim cost curve. Now, when pricing under new lapse rate assumptions, such as those in column three of Exhibit II, we can take our "baseline" claim costs and multiply by the column three factors to create a set of expected claim costs resulting from this new lapse rate environment. This demonstrates that the new claim costs to be used to price under the scenario described by the column three headings are lower than those resulting from column two solely due to the difference in anti-selection, by the ratios of column three divided by column two (1.029/1.138 for duration one, for example). Of course, the claim costs would be adjusted for other product and underwriting differences between the column two era product and the column three era product.

Conclusion

Although the impact of anti-selection may be lower in today's environment of lower lapse rates and rate stability (implying that events that create additional lapses will be rare), anti-selection by LTCI policyholders should be considered when developing experience reports from historical data or selecting claim cost assumptions for pricing or reserving. Credible data from prior periods should be adjusted to reflect differences in lapse rates, including additional lapses resulting from events. The selection of the health status differential variable is an important consideration when modeling these effects, and actuaries should consider how they might best develop a credible estimate for this variable. ❋

Exhibit II

Policy Duration	Higher Lapse Rates No Events Moderate HS Differential	Higher Lapse Rates Two Events Higher HS Differential	Lower Lapse Rates No Events Moderate HS Differential
1	9.2%	13.8%	2.9%
2	13.9%	21.2%	4.8%
3	16.6%	25.6%	5.9%
4	17.7%	27.3%	6.5%
5	18.1%	32.2%	6.5%
6	18.2%	32.1%	6.4%
7	18.0%	35.8%	6.2%
8	17.5%	34.1%	6.0%
9	16.8%	32.1%	5.6%
10	15.8%	29.5%	5.2%
11	14.5%	26.5%	4.7%
12	13.9%	24.8%	4.5%
13	13.7%	23.7%	4.3%
14	13.7%	22.8%	4.3%
15	13.7%	22.0%	4.3%
16	13.7%	21.6%	4.3%
17	13.7%	21.2%	4.3%
18	13.7%	21.2%	4.3%
19	13.7%	21.2%	4.3%
20 +	13.7%	21.2%	4.3%

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Projecting Policy Persistency

by Bruce Stahl

Many LTCI actuaries were watching the LTCI reserve assumption developments in NAIC committees over the past couple of years. One particularly sensitive assumption was the policy termination rate. As LTCI tended to be termination supported, some of the regulatory actuaries were naturally concerned that LTCI termination rates were much smaller than had been anticipated even four or five years ago. They wanted to indiscriminately impose very small termination rates on all insurers. Yet some company actuaries argued that the terminations were not always small, and varied from company to company.

We can understand why regulatory actuaries might want to apply one standard to all companies. As a pricing actuary for some small LTCI carriers during the late 1990s, I was personally concerned about using the actual historic company experience for an issue-age priced product. I speculated that the smaller company terminations may have been higher than those of larger companies because of the company financial ratings, and I considered that the small companies might sell their LTCI to a highly rated company.

Yet recent persistency studies reveal an explanation for the varying termination rates among LTCI carriers, that is intrinsic to the business itself, rather than to the company. Persistency varies significantly according to policy benefits, marital status, risk classification and distribution channel. These factors are apparent in the 2004 report, "Long-Term Care Insurance Persistency Experience," sponsored jointly by LIMRA International and The Society of Actuaries LTC Experience Committee. They are also apparent in a study that the Penn Treaty actuarial department recently prepared. This study included regressions, separately by policy duration, of a variety of factors on persistency.

Policy benefits. Reviewing the LIMRA/SOA study, most significant among the mainstream benefit options appears to be the automatic increasing benefit option, which tends to have higher persistency than policies without it. Yet having unlimited benefits or a lifetime benefit period also experiences better persistency. The Penn Treaty study had mixed results on both of these options, as the predictor coefficients did not behave consistently by duration. For example, the increasing benefits option appeared to reduce persistency in early durations, but increase it in later durations. One interpretation of this is that the high premium has more of an impact on the early-duration persistency than it does on the later.

Marital status. Both the LIMRA/SOA study and the Penn Treaty study identify better persistency for married individuals. With a termination-supported product, this suggests there should be pressure for increases in premium rates for married couples, possibly in the form of smaller spouse discounts. Spouse discounts are normally based on lower morbidity for married couples than for singles, yet varying persistency assumptions by marital assumptions may be appropriate as well.

Risk classification. The small amount of data in the LIMRA/SOA study identifies a lower lapse rate for substandard policies than for standard. The Penn Treaty experience includes much more exposure in substandard classes, and it suggests that total terminations are significantly higher for substandard classes. Penn Treaty data does not identify mortality and voluntary lapses separately. The substandard classes may have much higher mortality. Yet a reasonable conclusion is that substandard classes experience lower persistency.

Distribution channel. The LIMRA/SOA study provided confirmation of what the industry has known for some time. The LTCI business that is sold through captive agents experiences higher persistency than that sold through independent producers.

Because persistency varies significantly by the character of the business, actuaries will do well to consider the intrinsic character variations in their projections, whether they be for pricing, financial modeling, asset adequacy analysis or GAAP recoverability testing. ✵

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Articles Needed for the News

Your help and participation are needed and welcomed. All articles will include a byline to give you full credit for your effort. *Long-Term Care News* is pleased to publish articles in a second language if a translation is provided by the author. If you would like to submit an article, please call Bruce Stahl, editor, at 856-566-1002.

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If you have questions, or if you must submit in another manner, please call Mary Pienkowski, 847-706-3548, at the Society of Actuaries.

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