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Risk Tolerance in Long-Term Care and Reinsurance

Track: Reinsurance/Long-Term Care

Moderator: AMY PAHL
Panelists: ANDRONICO LUCAS CASTILLO
MICHAEL W. FARLEY
JAMES D. MAUGHN
Recorder: AMY PAHL

Summary: Many long-term-care insurers entering the market today seek reinsurance protection of some kind.

Panelists discuss the primary risks of long-term-care insurance, reasons for reinsurance utilization, and the variable forms of long-term-care reinsurance in today's market. Participants not only ask questions, but add their insights to the panelists' comments.

Ms. Amy Pahl: I work with Life Care Assurance Company and I'll be moderating this session. Many companies entering or contemplating entering the market today have a very difficult time gaining even a minimal comfort level with the risks, which are unique to long-term care (LTC). For example, data is still limited and often outdated. The benefit structures and providers are constantly changing and the investment in administrative expertise and agent training is significant. And this says nothing of the reserve and surplus strain that underlie the product. This environment offers a great opportunity for reinsurance.

We're fortunate today to have three presenters with current hands-on experience with these issues. They will each offer their unique perspective of the (LTC) risk and how reinsurance can play a role in managing that risk. First, Mike Farley, vice president with Allianz Life, managing the financial aspects of the LTC operation, will present and discuss his view of the LTC risks, how you might quantify it and, ultimately, make a decision on the use of reinsurance. His focus will be from a direct company's perspective. Andy Castillo, vice president with Munich American Reassurance Company, will discuss the challenges that he sees LTC insurers faced with and how reinsurance may offer a solution to those challenges. Last, James "Buddy" Maughn, executive vice president and chief actuary of ERC Life Reinsurance Corporation, will review the challenges that reinsurers face as they attempt to develop solutions for insurers.

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

Mr. Michael W. Farley: Allianz has been involved in the LTC industry for about 10 years. I personally have been in LTC for about nine months. Because of that I would like to invite a lot of discussion as far as how some of you have become comfortable with the risk of LTC. I'm still in the process of trying to understand it and feel comfortable with it and I don't know if I will ever get there.

My history is pretty broad. I've been involved quite a bit on the financial side with fixed life and annuities and life insurance, some corporate work as well as some international work. When I was presented the opportunity to be a financial officer for LTC nine months ago, I asked myself why I would want to do it, but I look at the marketplace and it's a great opportunity. It's been a great experience and I've learned a lot, but there's a lot of risk involved. Because of that the first thing I needed to do when I became the financial officer was try to get my arms around what is LTC? What are the risks? How can it be quantified? How can it be managed?

I will talk about LTC risk analysis from the insurer perspective, a brief discussion of what I see as the LTC risks, a summary of the analysis that we put together with some of the details, and finally the enterprise perspective on reinsurance once we do understand the risks.

Like I mentioned, the goal when I started was to basically understand the LTC risks. That is more than just understanding what the risks are; it's also understanding the impact and timing if you're wrong with your assumptions. The key for us is the ability to manage the business if our assumptions are wrong and that's something that I don't know if a lot of people look at.

We looked at a variety of profit measures, the key one being the present value of profits over present value of premium. We also looked at, obviously, the profit emergence of ROE, as we wanted to figure out the timing impact.

Our analysis consisted of basically taking our pricing models from a direct perspective and doing some sensitivity testing on it. We kept everything consistent except for one variable. We changed one variable at a time to different levels and, basically, ran our complete pricing model and came up with the results.

We did not look at confidence intervals for our assumptions. The theoretical way would be to do that and come up with the different risks and graphs assuming that. When I started looking at confidence intervals for some of these, I determined the results would be so widely disbursed that it wouldn't make a lot of sense.

Our results are impacted by product features, so we tested some specific items that I'm sure some of you would be interested in based on conversations from the last couple days, specifically with regard to limited pay and cost of living adjustment (COLA) riders.

We broke LTC risk into expenses. We didn't look at start-up expenses, but instead looked at deviations from our acquisition overhead and maintenance. If we were off by 10-20%, what are the impact and the timing of the impact? We also looked at investment income, earned rate, "1%. What is the ultimate difference in profitability for the block of business?

Persistency. We included both lapses and mortality as persistency. We looked at the impact if it's better, which is kind of interesting, because "great" persistency isn't great for the company.

We also looked at claim costs and selection. We varied it by age and duration and tested both moderate and poor underwriting selection factors, assuming that we had our consistent, strict underwriting. We also looked at the ultimate incidence as well as the continuance and severity of claims. There are a lot of dynamics that go into those last three together and sometimes it's difficult to separate them, but we attempted to do that.

Chart 1 is a graph of the results of our persistency analysis. It demonstrates a present value of profits over present value of premium at pricing, our "better" and our "great" experience. What it illustrates for me is that even if we have great persistency we can break even on the block of business, which is something that everybody in management needs to know. It does not illustrate the timing of any deviations, but rather the magnitude at issue.

Chart 2 shows the impact of sensitivity to underwriting selection. Underwriting selection impacts mainly the first eight to 10 years. We feel our underwriting selection impacts ultimate incidence as well. In this analysis, we lose money on a present value basis if we get poor underwriting selection. Does this make sense to people?

From the Floor: How much did you vary the underwriting from pricing to moderate and to poor?

Mr. Farley: I don't have the numbers in front of me but it did vary by age and duration. Profits were very sensitive to changes in underwriting factors. There was not a significant deviation in the percentages that we did use. I can talk more to that later if you'd like.

Those graphs showed, basically, a snapshot of the present value of profits over present value of premium. That doesn't tell the real story or the whole story. This is something that I think is very important as actuaries. A most important part of any project is to begin with the end in mind. How is it going to be presented? Who are you going to present it to? and What type of information do you have?

Based on that, what I wanted to have accomplished is a one-page overview with a risk analysis summary and a corresponding reinsurance strategy that I could step through with our chairman and have him feel comfortable that we understood what the risks were. I also wanted a one-page detailed description behind it, which talked about what each risk is, the timing, and the deviation of the risk, how it could be measured, and how we can manage it going forward.

Now, these were the results. I'd be very interested in other people's comments with regard to some of this, because I think this is correct, but I'm sure everybody has some different experiences. With regards to the underwriting selection, the impact and timing is primarily in the early years. We defined it as a moderate risk and the ability to manage we thought was high compared to some of the other risks. The reason, obviously, is your underwriting impacts your morbidity and your claims experience, in the first several years, much more than ultimately.

TABLE 1

Risk Analysis Summary

Risk Area	Impact & Timing of Profits	Risk Level	Ability to Manage
Underwriting Selection	Primarily early years	Moderate	High
Ultimate Incidence	Large effect in later years	High	Medium
Severity of Claim	Large effect in later years	High	Low
Policy Persistency	Increasing effect by year	Moderate	Medium
Expense Levels	High in development years	Low	High
Investment Income	Increasing effect by year	Moderate	Medium

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The next result is the ultimate incidence and here you have a large effect in the later years. The risk we felt was very high and the ability to manage was medium. One of the difficulties, as you go forward and start monitoring your block of business, is, in the first 10 years how much of your claims are due to your overall incidence level versus how much is due to your underwriting and your selection. It's very difficult to split it and determine the impact of each separately, but it is something that you need to do.

The severity of claim is a risk that really scares me, both the impact and timing. There's a large effect in the later years. The risk level is very high and the ability to manage is very low. By the time you've measured your incidence and length of claims with any reliability, the experience may have deteriorated to a point where it will be difficult to restore profitability with a rate adjustment.

The next one is policy persistency. This has an increasing effect by year. The risk level we felt was moderate and the ability to manage is medium. The expense levels, obviously, are very high in the development years. We did not test that, but the risk level we felt was relatively low compared to the other risks and the ability to manage is high since we have control over our own expenses.

The last one is investment income. There's an increasing effect by year. As your active life reserves grow it becomes more and more important. The risk level we felt was moderate with a medium ability to manage.

From the Floor: You've indicated medium ability to manage persistency. How do you affect it?

Mr. Farley: With the policy persistency?

From the Floor: Yes, I just wondered if you had unique practices that provided an ability to manage it.

Mr. Farley: The ability to manage a lot of it would be through rate increases if you would be able to justify them and need them.

From the Floor: Was this level mainly just based on the sensitivity of the profit to the changes in risk using profit over premium level?

Mr. Farley: Yes, it was present value of profits. We did look at present value of profits over present value of premiums, but we also looked at just the timing and the impact of it. The larger the deviation that occurs in year 20, for example, the greater the risk will be.

I went through this process to identify what the LTC risks were, and with that I was able to come up with a recommended reinsurance strategy for the business unit. But there are a lot of things that come into play from the enterprise-wide or company perspective that you need to consider. I know Andy and Buddy are going to get into some of those. The key one, in my opinion, is risk tolerance. I mean do you have a high or low risk tolerance? Do you have to be showing GAAP profits quickly? Is it important to have stability of earnings? A lot of that comes back to just the size of the company, where you're owned, who you're owned by, and if you're publicly traded or not, so that's an individual company consideration.

The other ones that I think are pretty interesting are internal hedges. For some of the risks that we talked about, for example, the investment rate risk for LTC, if your interest rate goes down, your profits decrease. But if you're sitting there with a company-wide perspective and a large annuity block and interest rates go down, your annuity persistency improves and your annuity block actually performs better. You have to decide if you're okay with that risk or if you want to internally hedge it. You can vary your reinsurance based on these types of things.

You also have mortality improvement. If your mortality improves significantly, obviously, it hurts in LTC, but it also helps if you have mortality reinsurance or life insurance out there in another business unit. I think a company perspective, a company-wide perspective is important.

Obviously, there are surplus concerns. Surplus strain with all the growth that you're expecting is a consideration as well as profit targets. If you have specific GAAP ROE profit targets, depending on the structure of reinsurance, you can either enhance your returns or not. It's an internal decision regarding expertise level. This is something I've become very aware of as there are a lot of experts out there and it's great to be able to get into discussions with them and reinsurers have a lot of knowledge that you can rely on.

Mr. Andronico Lucas Castillo: I've been with the Munich about 12 years. My background is in the life product development area. I did life reinsurance for a number of years. And in the past couple of years or so I've been involved in our developing disability insurance , disability income insurance, and LTC reinsurance areas. In fact, in the past two years we've been involved in LTC.

To give you a brief overview, I'm going to talk about our risk perspective on LTC, challenges that we see LTC insurers confronting, and the reinsurance solutions in response to some of the challenges that Mike talked about. I'll quickly go through the first two items and, perhaps, we can go to the third one and have some discussions on that.

For some background, the Munich Re has been involved with LTC for a number of years in Europe, Japan, and Israel. In Germany, I believe, LTC coverage is a compulsory coverage. For a certain amount of income, LTC is required. Munich American is the U.S. subsidiary of the Munich Re Group. We've been looking at the market for a number of years, and about two years ago we decided to enter the market. One of the main reasons was that we thought the regulatory climate was friendly. It had been in flux for a couple years, but it seemed somewhat settled. It became quite clear that the regulatory environment was open to the development of the private LTC insurance marketplace.

With that said, I looked back and started thinking about what risk tolerance really means for us as a company. We decided to proceed in entering the LTC reinsurance market. Risk tolerance, I think, drives how we deal with insurers, you as our clients. It really defines how we develop the relationships and how we maintain the relationships with our client companies. We looked at the ceding company's long-term perspective and at how we can assure alignment of interests in our arrangements. That's quite important to us.

We also looked at the insurer's financial strength. In a sense, that tells you how long or what the perspective of the LTC insurer would be. We're in it for the long run and we hope our partners are in it for the long run as well.

We also looked at our own spread of risk and the expected volatility of results. We help our clients to do that, but, at the same time, look at our own book to make sure that we have sufficient coverage.

When we looked at the market a couple years or so ago, we saw a number of challenges, especially for a new company going into the market. The first concern is access to expertise. I recall a few years back there were not as many experts in the marketplace as you see now. It's also fairly difficult to maintain the sufficient expertise in the areas of underwriting, product design, claims management, sales and marketing. There's a lot of experimentation going on in the marketplace.

We've heard about Internet marketing. One of the points of discussion in the workshop yesterday (Session #76WS "Pricing New Long-Term-Care Benefits," is not available in the *Record*) was that of simplified issue and guaranteed issue type programs in a group setting.

The second thing is the high cost of setting up the operational infrastructure, especially for a new company coming in. You look at all those functions. You need to have all those things in place before you can really even sell the business. That's a high capital expenditure! There are also high financing costs. We've seen some projections demonstrating the surplus drain. It continues for three, four, and even five years, so it's a pretty high expense product. I think we heard a little bit about reserving requirements. You do build up a big amount of reserves and the risk capital requirements are also pretty stiff.

The challenges that we see are pretty much the same challenges as you see: pricing risk and limited morbidity data among others. The usefulness and availability of insured data is really quite limited, especially as the products evolve and new benefit features come in. You really have to be careful that the historical data you're looking at is applicable going forward.

Mike talked a little bit about lower lapses and mortality. I know on the life insurance side mortality keeps coming down. I'm not exactly sure where mortality assumptions rank in importance, but that's an important consideration.

Expenses. What's critical mass? I'm sure everybody has different opinions on that. Investment income, premium rate guarantees, limited pay plans. We heard a lot about product risk and the evolving products of LTC.

There are provider risks along with the evolving LTC service delivery systems. There are distribution risks. You've got Internet marketing. Substandard underwriting is one that I've heard being discussed. Again, there are lots of other risks. There are cycle trends and other regulatory impacts.

Let me go through some risk management solutions for this product line. I'll concentrate on reinsurance tools. The other solutions could be on the outsourcing side, wherein, it can vary all the way from turnkey-type services to purchasing specific services in underwriting, product design, claims management, and administration.

For reinsurance, you've got the basic structures, as I'm sure everybody's aware. You've got YRT, coinsurance, modified coinsurance, extended wait, specific stop loss, or excess dollar coverage. I'll explain a little bit more about that and you can even have aggregate stop loss. The special provisions that go along with the reinsurance arrangements are very key as well, because it addresses items like recapture provisions and rate guarantees. You probably have special provisions such as experience refunds, how to handle replacements, or conversion type programs.

Let me start by addressing some of the risk areas or challenges that Mike discussed. First is underwriting expertise. A possible solution for that would be a plain, straight YRT for the selection period on a quota share basis. The YRT premium could be a function of your claim costs. That would be one way of handling it. A variation would be an agreement encompassing our affiliate company, Life Plans.

Coincidentally, when we decided to enter the market two years ago, our company also decided to purchase Life Plans, one of the pioneers in the LTC market. In a variation, if a ceding company follows certain underwriting protocols, the face-to-face assessments and the phone history interviews are done through our affiliate, Life Plans. The reinsurance arrangement will pay for those services. In back of that would be a YRT arrangement wherein we cover the risks for a certain number of years. It would be common to have fairly strong rate guarantees on these types of arrangements.

The next risk challenge that I think we heard is the uncertainty of ultimate incidence rates. Again, possible solutions may be straight YRT or a variation could be coverage on the incidence risk only. Or, a reinsurer could pay a lump sum when a claim is incurred, where the lump sum payment could be any one of a number of options. It could be a percentage of the claim reserve, for example. In essence, what you have is coverage for the incidence risk only and the claim termination risk is not passed on. The reinsurance premiums are typically based on expected incidence, plus some margin as a risk charge.

Another challenge is the claim termination risk, the severity of claim, and the evolving service delivery systems. We don't yet know how the changing service delivery system is going to impact claim terminations. Possible reinsurance solutions would be straight YRT reinsurance or extended wait. By that what I mean is the reinsurer is liable for benefit payments in excess of a certain dollar amount. Typically, the dollar amount would be defined as $100 of daily benefit times two years, if it were a two-year extended wait type arrangement.

Again, a variation of this could be where the claim termination risk is reinsured. And how can you do that? Perhaps, what you do is when a claim is incurred you pass on some amount related to the claim reserve to the reinsurer and, basically, transfer the claim continuance risk to the reinsurer. Of course, under this structure, the reinsurer assumes the claim management function or would require or exert considerable control or influence on claims decisions.

Another risk challenge is the high cost of setting up the operating infrastructure. Possible solutions would be first dollar quota share coinsurance. This would be especially applicable to a new company starting in the marketplace. A reinsurer could pay for a specific portion of the infrastructure costs and in return there would be some production commitments to the reinsurer. In any of these arrangements a reinsurer really makes available its LTC expertise and resources.

Another risk challenge is investment income needs and the high surplus or financing costs. A possible solution would be first dollar quota share coinsurance or modified coinsurance. Modified coinsurance may actually work better for a company that wants to retain control of the asset investment function.

I was on a session panel about a year or so ago. We were actually talking about disability income reinsurance, but there are a lot of similarities in terms of what reinsurance coverages are available. We asked a number of experts how they view various forms of arrangements, ranking them as good, moderate, or poor in addressing the specifics of these issues. It's interesting that the experts do not have a consistent answer. We can look at some of these items in Table 2, and perhaps, your views are different than the experts.

Ms. Pahl: Andy, you offered a number of different solutions. I'm wondering if you can give us some idea of the most common reinsurance structure that you are using and why?

Mr. Castillo: I think when you come right down to it the most common is either coinsurance or YRT.

Ms. Pahl: And why?

TABLE 2
REINSURANCE SOLUTIONS

Risk Tolerance in LTC and Reinsurance

Effectiveness Indicator

Good	**G**
Moderate	**M**
Poor	**P**

		Coins	**YRT**	**Ext W**	**Stop L**
Limit Claims Per Life		P	P	G	P
Limit total claims in 1 Yr		P	P	G	G
Minimize volatility		M	M	G	G
Fund growth		G	P	P	P
Reduce surplus drain		G	P	P	P
Buy/sell block of business		G	P	P	P
Ease of reins admin		G	P	M	M
LTC expertise		G	G	P	P
Prod. Dev/pricing support		G	G	P	P

Mr. Castillo: It's simple in structure and addresses a number of the important issues that the ceding company has.

Mr. James D. Maughn: My perspective is that of the reinsurer's risks. To help you appreciate where I'm coming from, I'll tell you a little bit about our company as well. ERC has been in the LTC reinsurance business for about 20 years and we are currently the third largest global reinsurer. My perspective will be more from North America, although, we are reinsuring, much as Andy's company, in an array of different countries throughout the world.
I want to start with some basic concepts and though they may be a bit obvious, I think they're worthy of review. The first one is the importance of companies with

knowledgeable people on both sides recognizing the appropriateness of what I'll call the partnership concept. This is critical and has been touched on already, but because of the long tail nature of the risk and the lack of current historic data it becomes exceedingly important.

Another basic concept is alignment of interests. Risk sharing, if you want to do it on a coinsurance basis, can be similar, but the risks are not identical. For the long-term liability of this product, alignment of certain interests is essential.

A third basic concept is that both sides expect to make money and need to, over the long haul, in order to have a viable relationship. An ongoing agreeable basis of risk management issues is also very critical to the long-term profitability of the business.

Some lessons we've learned over the last 20 years would include the importance of underwriting. It is the single most critical element, in our view, of the profitability for the line of business, and related to that are the issues of underwriting concessions, underpricing, excessive compensation to the distribution system, and advanced issue ages. We found beyond age 80 to be a very critical factor. It's extremely important. The high cost, significant declines, and marketing issues make the older issue ages extremely difficult.

I'll admit to Andy we really don't know how to price excess reinsurance. Our experience has proven that out, and I think it truly follows from the fact that we don't have good historical information in claim costs. The reality is that long-term claim levels are unknown today. What we've found to help companies who get into the business is a turnkey solution. It is truly the best alternative we have found, but there are always exceptional situations where other alternatives can work. When I say turnkey, it may or may not include every single function.

Second to underwriting in priority from our perspective for developing a profitable LTC line of business is managing the risk. What I'd like to do at this point is go through some of the kinds of things that are worthwhile, in our view, for both the reinsurer and the reinsured to monitor on an ongoing basis.

Charts 4–9 are simply examples of the kinds of things that are worthwhile keeping track of. For example, the limited pay distribution: single versus lifetime, daily benefit distributions, claimant age distribution, risk class distribution, non-forfeiture, and COLA. Monitoring the basic distribution of the business that you have is fundamental. Distributions by benefit period and length of claim by benefit period are all fairly straightforward stuff as long as you keep track and monitor that sort of thing. Placement statistics are particularly important to watch, particularly the level of declines and not taken rates. Of course, the ever-popular experience analysis. It's necessary for the client and the reinsurer to stay abreast of emerging experience so that they can address the need for rate increases, tracking actual to expected claims by issue age, issue year. You need to look at claim costs by diagnosis and, of course, termination rates as well.

I'll turn to challenges facing the LTC reinsurers. Structure is always important in reinsurance. LTC is surplus and risk-based capital-intensive business, as suggested previously. However, there are ways to structure arrangements using YRT back to the writer that will minimize the strain for the ceding or the direct writer. It's important to remember concepts of partnership that I alluded to earlier and alignment of interests, knowledgeable partners, and quality efficient administration. One that somehow seems to escape some folks is the importance of not spending more than the total dollar. What I'm talking about here is looking at the present value of commissions, expenses, and your profit margin as a percentage of premiums. Regulators require, of course, a basic or minimum basis loss ratio. This may sound overly obvious, but it's amazing how often we see products that violate the concept of failing to recognize how large a proportion of their premium is going toward their expenses and commissions.

As stated previously, there is limited morbidity data. What you want is both sides really to be at risk to some degree. We view excess risks or excess reinsurance as, generally, being too risky for one side or the other and that's, generally, ineffective for both sides. Limited morbidity risk data emphasizes the need to price more experimental benefits more conservatively and to leave room for rate increases, if necessary.

Another item is cash-flow testing, which is more important for LTC insurance than many life products. Because LTC risk is a long tailed risk with investment income application, the investment strategy varies from most other health products. It may be, depending on sales mix, difficult to obtain assets with sufficient duration. Further, there needs to be a recognition of the fact that there is exposure to interest rate fluctuations due to significant reinvestment risk. The reinsurer doesn't control the ability to change rates. This, in my view, makes rate guarantees by the reinsurer inappropriate, especially since the ceding company has such a right. The reinsurer shouldn't price the loss ratio that isn't guaranteed and the reinsurer should require contract provisions that cause carriers to operate in their mutual best interests.

Another challenge for the reinsurer relates to underwriting. We'd like the carrier to gather as much information as is prudent, including medical records and a cognitive exam, without sacrificing speed or accuracy. The reinsurer needs to have their clients be almost paranoid about cognitive risk, recognizing what I'll call a mismatch of the underwriter's skill against the older applicant's knowledge of his or her health.

In my view, some risks simply shouldn't be taken, like non-can coverage on the direct writer's part. I suggest you be aware and beware of marketing driven companies where simply one claim can offset a lot of good work. Recognize that excessive commissions along with the loss ratio required, makes profitability very difficult to achieve. Be aware of companies that are poorly regarded by regulators, as the regulator's help is often needed to get rate increases. And, lastly, be aware of suspect agent supervision and poor agent quality.

All these challenges, of course, tie back to those challenges of the direct writer, as were identified by Mike and Andy.

Mr. Gregory A. Gurlik: I guess this is aimed more at reinsurers and maybe not so much at your companies because I'm not aware of your practices that closely. It seems to me that there are innovations in the industry such as limited pay plans, limited underwriting for groups, things that as a direct writer make me very nervous. Yet, companies are out there doing those things, but I'm not aware of any direct writer who's really retaining the risk on those types of benefits. I'm wondering if you feel that the reinsurance marketplace tends to drive innovation to the bleeding edge at times and, in fact, is that one of purposes that the reinsurance market serves, is to allow that kind of innovation in the marketplace.

Mr. Castillo: I think reinsurance actually does help you be more innovative in the sense that it allows you to do some of those things that may be considered experimentations. However, when we are asked to participate in those types of areas, we are also from our end quite concerned about the level of risk that we're taking. Those are some of the areas that we can actually help out or at least share of the some risks with you. Again, the partnership concept and the alignment of interests is key.

Mr. Maughn: I'd echo that and simply say that LTC, in general, is innovative in spite of the fact that it's been around 10-20 years, although, in migrating forms and degrees of generations of benefit. The fact of the matter is that it's not very long in contrast to the length of the liability. Yes, reinsurance, certainly, can aid experimentation. But, as I kind of alluded to, I think that is something that also suggests the need for a little more conservatism and making sure that you've got your ability to change your rates.

Ms. Pahl: I want to comment that Buddy's comments about monitoring your mix of business and your portfolio demographics are very important. And to the extent that direct writers or reinsurers are willing to take a limited-pay risk, for example, is only in the context of minimizing how much of that is actually issued. The risk is out there, but we cap, perhaps, how much of the portfolio you want to have in limited pay and you would take action if it went beyond what you were willing to reinsure.

Ms. Joan P. Ogden: A question for the reinsurers: everyone agrees underwriting is critical. What kind of involvement and to what extent should the reinsurer be involved in auditing or evaluating the underwriting of the company and what methods should they use?

Mr. Maughn: I'll start out. The answer is, yes, they should be involved. Methods, I guess, can vary a lot from company to company. But, fundamentally, getting in with early auditing efforts is more important than, perhaps, the exact basis that you might use simply because it's like I indicated in my talk. One large claim can make a huge difference. Rather than waiting a year or longer to see how things develop, getting involved early and up front is important.

Mr. Castillo: We like to get underwriting audits or reviews. That's a very important function on our side. And, in fact, I would think with, again, the innovation in the LTC market, a ceding company would welcome another company's perspective on their operations on the underwriting end. I think it helps both parties.

Mr. Farley: From a direct writer's perspective, I also think the underwriting is the key. But as a direct writer, we did get an audit from our reinsurer to come in. We, basically, sent out complete files and asked them to validate what we were doing internally because it is so critical and everybody needs to be on the same page.

Mr. James M. Glickman: I'd like to hear comments both from the reinsurers, but especially from Mike as a direct company perspective on how I view LTC reinsurance, especially as it's differentiated from, say, life reinsurance. My perspective is that unlike life insurance, where everything seems to be pretty well known, the reinsurers can bring some expertise, thoughts, and auditing procedures to it. For life insurance it's more like a zero-sum game where you're looking for a fixed rate to improve or leverage your position or protect against the excess risk on life insurance.

In LTC I don't picture it as a zero-sum game. The fact is that the results you have can vary so much based on how you do it, and the expertise you apply, and how you're monitoring it, and, especially, how early you get into managing it and knowing what to look for that the reinsurer plays a much more important role. In fact, a reinsurer offering what seems on the surface to be a higher price may wind up being a lower cost and a more profitable situation for the direct insurer as well as the reinsurer, because the two of them together can affect the results much more so than they do on the life side. For that reason it's my perspective that the reinsurer on LTC has to be much more involved, both day-to-day and regularly in audit functions, the development of the product, analyzing exactly what's going on, and making sure the company has the expertise and is performing the management necessary. And I'd like to hear comments from all three, especially from Mike.

Mr. Farley: As far as the direct writer perspective, what I would love to be able to do is reinsure 100% of the business with guaranteed rates and just lock in my profits, but nobody will let me do that. Because of that based on my grid before, the next step, obviously, would be to look at the highest risk and the risks that we can't manage. But the reinsurers don't want to just take that either without charging a significant amount, because they have to look at the best interests for their company. It is very difficult to develop on LTC like it would be, perhaps, in life insurance or an annuity business, the type of relationship that is not a partnership, because you do have to work together on the underwriting process. You do need to look at the experience set as it evolves and unfolds. In order to get just a stop loss it's very expensive, because the reinsurers do not want to guarantee that. And from what I look at and what I see, I don't blame them, because I wouldn't want to bet my company on it either.

Mr. Maughn: Although I'm not sure I agree with Jim's description of the life side totally, we'll let that go as a good generalization. I guess my perspective is the reinsurer and what we'll call a relatively new line of business here can very much help the company with a little bit of a good cop, bad cop sort of thing. When you're in an environment like this, where the company with much of the risk is accustomed to taking the good history and historical information to base what it does on, it finds itself in a little more awkward position relative to this unknown. Therefore, the reinsurer winds up being a good ally to get through all of the hoops and cross the hurdles associated with trying to produce something that in the end will make the company money. Again, to the extent the reinsurer then can absorb some of the attributes of the needed requirements that, otherwise, would be difficult if the company people alone were pressing for, it's just a good, perhaps, marriage in a new kind of product offering.

Mr. Castillo: Again, alignment of interests is key. Reinsurers can give you another ear on what you're doing. We also need to look out for our own interests as well, our own spread of risk.

Mr. Andrew W. Perkins: Just one more perspective on the same question that Jim raised. I think there's a lot of diversity as to what the clients are looking for, the direct writers. Some of the larger companies don't feel they need an adviser and really are not looking for that in their reinsurance pursuits. They may have balance sheet issues they want to solve or other things. You don't have a very interactive relationship in those kinds of deals that are going with the whole spectrum. You have some clients who want a lot of that. I think my sense is most direct writers don't want to be told what to do, but are open to advice. I think that's the kind of relationship most of us as reinsurers are looking for.

But the other extreme, when the company really doesn't want to take much risk, as Mike was describing, it goes pretty far in the direction of the reinsurer needs more input if they're taking most of the risk. It's a whole range of different situations.

Mr. Bruce A. Stahl: I was wondering if the reinsurers have considered what the impact of the new model regulation would have on the relationships with the direct writers, given that if you do need a rate increase, the direct writers have a greater disincentive to take it.

Mr. Maughn: Well, clearly, the reinsurers do not have the right to raise rates at all in terms of the direct policyholder, so that hasn't changed. The key is, again, to align our interests and the reinsurance arrangement in such a way as to incentivize the direct writers to take appropriate action when necessary.

Mr. Castillo: I've alluded earlier to some of the arrangements with strong rate guarantees. They're not really complete guarantees, but the real effect is to be sure that we have a right to change or to control. You know, we don't have control of the rate changes. From our perspective, we want to make sure that all appropriate steps are taken. Typically, we'd follow the ceding company if they've taken the appropriate steps to manage the business, which may or may not include a rate increase.

Mr. Richard W. Vautravers: One of the new product designs, I mean, it's not that new, but as a LTC writer attached to a universal life (UL) or a variable UL policy, can any of you comment on the differences, if any, of the risks and the risk sensitivities of that type of product design over a traditional LTC policy?

Mr. Castillo: We've seen some LTC riders being designed and I think one of my concerns is that some of the companies are designing these LTC rider products without really knowing what the LTC risk is. I'm a little bit concerned with the underwriting that they're doing. They're applying life type underwriting and not really thinking much about the LTC risk that they're taking on, so that's one thing that we need to be aware of.

Mr. Maughn: Yes, I'd agree. The primary issue is the inclination to compromise the underwriting requirements for LTC, which, of course, vary from the basic life product. Of course, you can do that, depending on the motivation behind the purchase in the first place, and it's a matter of just anticipating as well as you can the appropriate compromising that doesn't then get you into significant claims problems.

Mr. Farley: From a direct writer perspective, I think, if I would combine a life policy with a LTC policy, what it's going to do is help mitigate some of the risk for the company. What I mean by that is, for instance, a single premium life policy with an accelerated benefit, if the policy remains in force I know I will be paying a claim. And with LTC it's like rolling the dice. You don't know what's going to come up. Is it going to be 40% or 60%? Your profits vary significantly. But if you combine the life benefit with the LTC, and it's just an accelerated benefit, it's just a matter of when it's going to be paid and not as much if it's going to be paid. I think from a risk perspective for the insurer, I actually like that product a little bit better, but I know there are difficulties with states and other things with regard to filing.

Mr. Castillo: I was actually commenting more on LTC riders over and above the actual duration type benefits. There are riders coming out, wherein, they pay over and above the actual duration. That's really a risk that I'm not so sure whether the life guys are taking into account.

Mr. Paul S. Bell: You've talked about the scarcity of data. You've also talked about the importance of underwriting. Do we have currently any underwriting feedback that's valid so that we can expect to see eight underwriting classes of super select to super turkey or are we still staggering in the dark?

Mr. Maughn: Well, I'll give my perspective. I think we're still a bit in the dark. It's not because of the absence of information as much as the consistency of it given the generational changes in the product from its early stages to date. There's just not a lot of comparability here.

Mr. Castillo: Yeah, eight underwriting classifications, preferred, super preferred, and what have you. I think it's going to be fairly tough, especially with the innovations going on in the marketplace and, again, the data. You know, when you gather the data it doesn't reflect how far behind it is the innovations. It's fairly tough.

Ms. Pahl: My opinion is that the number of rate classes is really more driven by the market than the data and to try and gain some advantage without jeopardizing the risk pool that various levels of classification would lead to. My opinion is that it's very unlikely we're going to see more than three risk classes, first, from a pricing perspective. If you go beyond that you're really making some wild guesses. A lot of companies really only price one risk class and then estimate what the discount is on a healthier life or the extra premium for a sub-standard life. That would be my opinion on where the rate classes are coming from and where they may go; they are more driven by the market as opposed to the data.

Mr. Farley: I would agree with that. A different perspective on it though is if you are looking at pricing, one of the things that happens is you look at your morbidity. And if you expect, for instance, a 10% improvement in morbidity or claim costs, because the life is healthier your mortality should be better, which goes against the better morbidity because your people are going to be around a lot longer and into the claim paying period.

The other thing that happens is your persistency's probably going to be better because your premium rates are lower for these people. Both of those actually hurt your premium because the people will be around. I think no matter which one you project out; they're going to kind of migrate together. I think it's very difficult to get a lot of the separation in the rate classes.

CHART 1
IMPACT OF POLICY PERSISTENCY
SENSITIVITY TEST

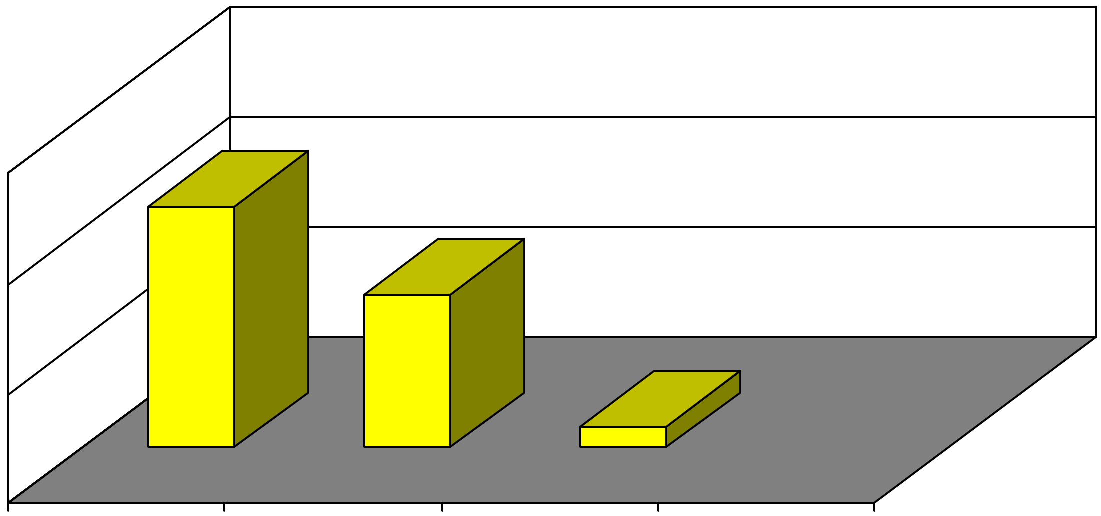


CHART 2
IMPACT OF SELECTION VARIATIONS

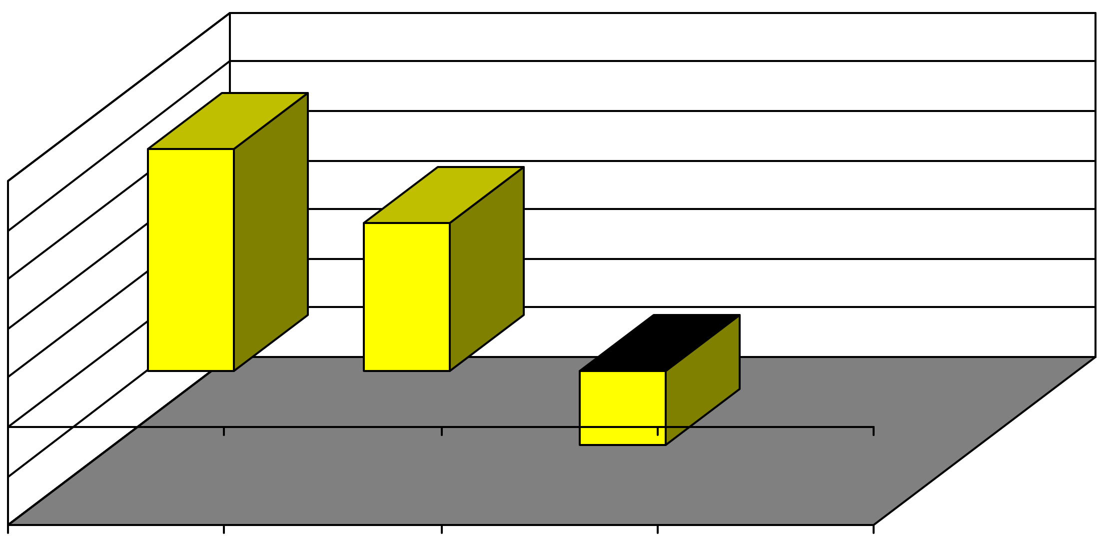
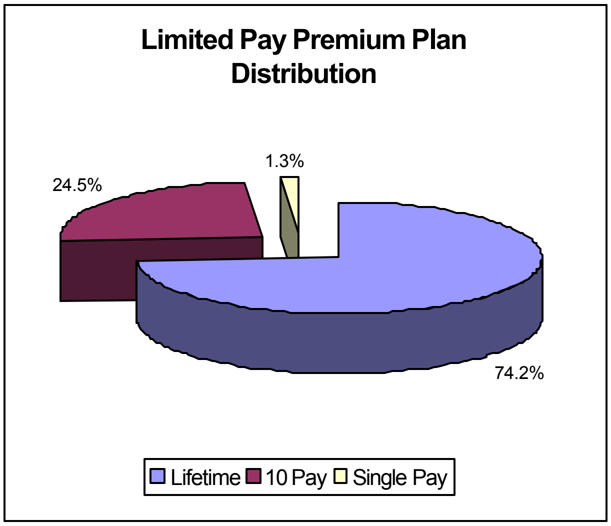
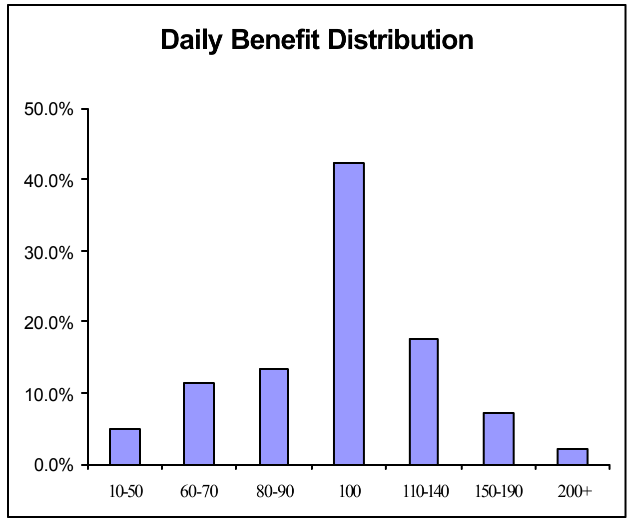


CHART 3
PORTFOLIO DEMOGRAPHICS





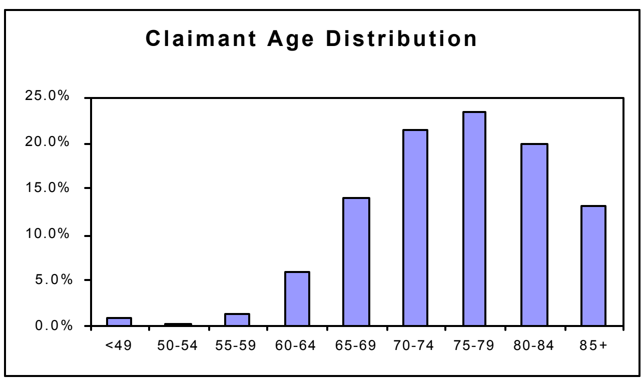
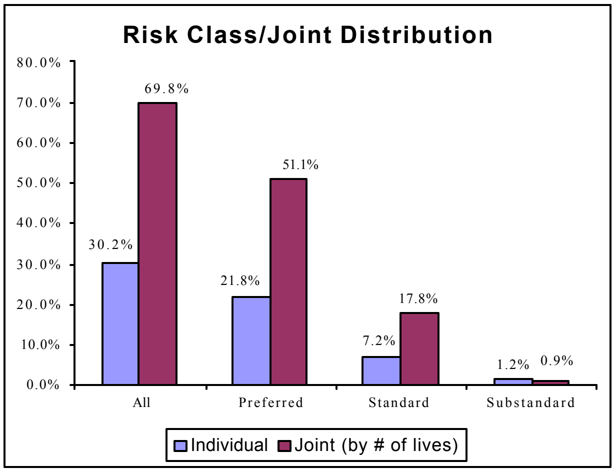
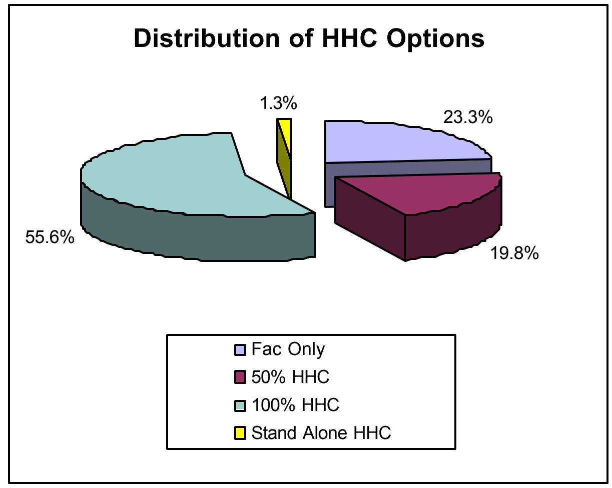
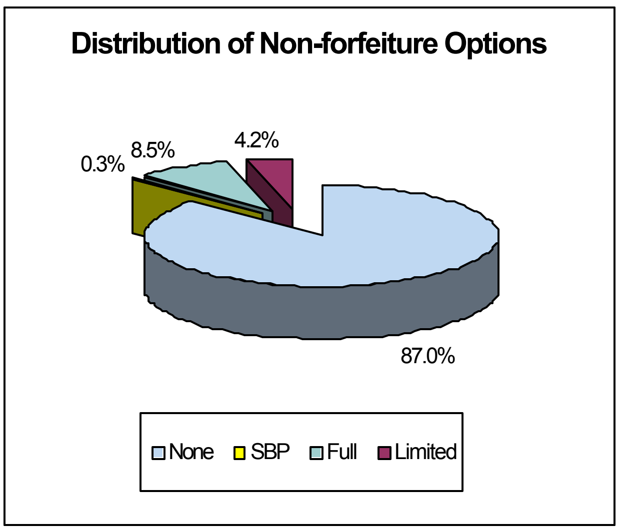


CHART 4


Risk Class/Joint Distribution
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
69.8%
30.2%
51.1%
21.8%
17.8%
7.2%
1.2%
0.9%
All
Preferred
Standard
Substandard
Individual
Joint (by # of lives)


Distribution of HHC Options
1.3%
23.3%
55.6%
19.8%
Fac Only
50% HHC
100% HHC
Stand Alone HHC


Distribution of Non-forfeiture Options
0.3%
8.5%
4.2%
87.0%
None
SBP
Full
Limited

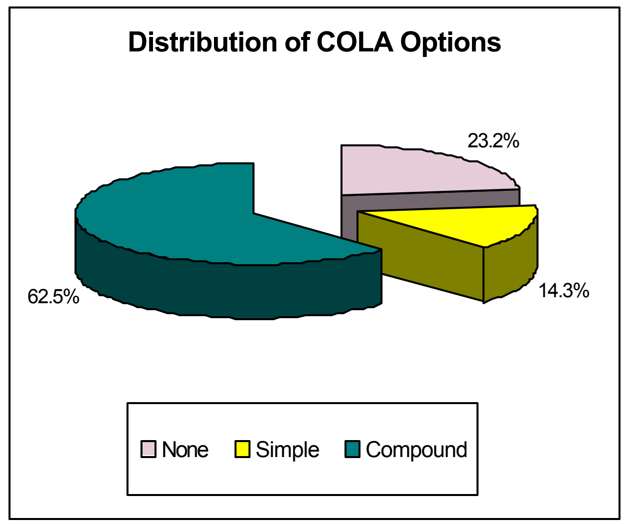
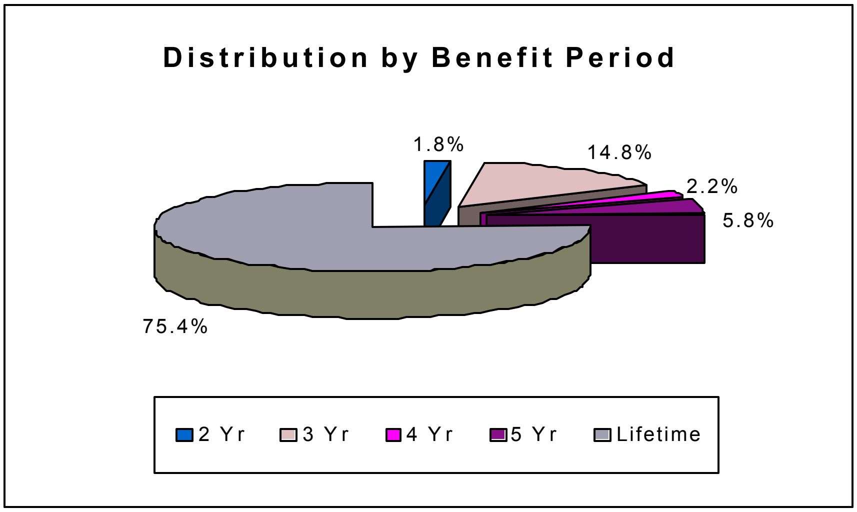

Distribution of COLA Options
23.2%
62.5%
14.3%
None
Simple
Compound

CHART 5


Distribution by Benefit Period
1.8%
14.8%
2.2%
5.8%
75.4%
2 Yr
3 Yr
4 Yr
5 Yr
Lifetime

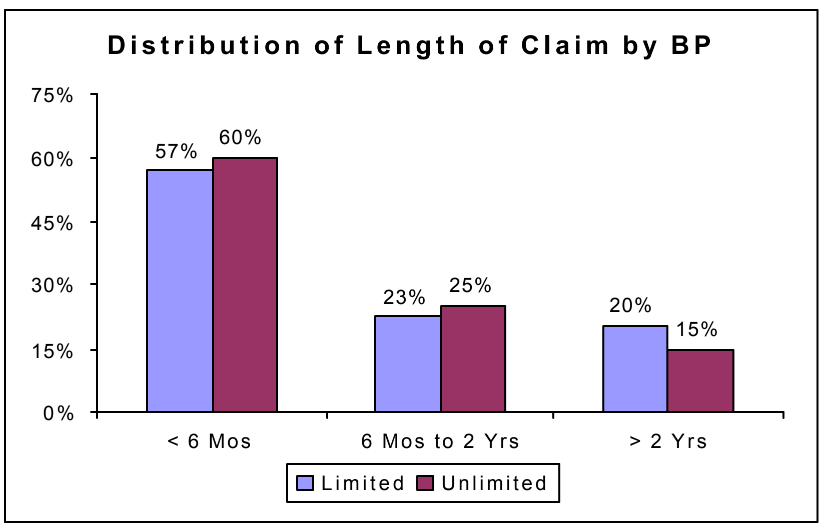

Distribution of Length of Claim by BP
75%
60%
45%
30%
15%
0%
57%
60%
23%
25%
20%
15%
< 6 Mos
6 Mos to 2 Yrs
> 2 Yrs
Limited
Unlimited

CHART 6
PLACEMENT RATES

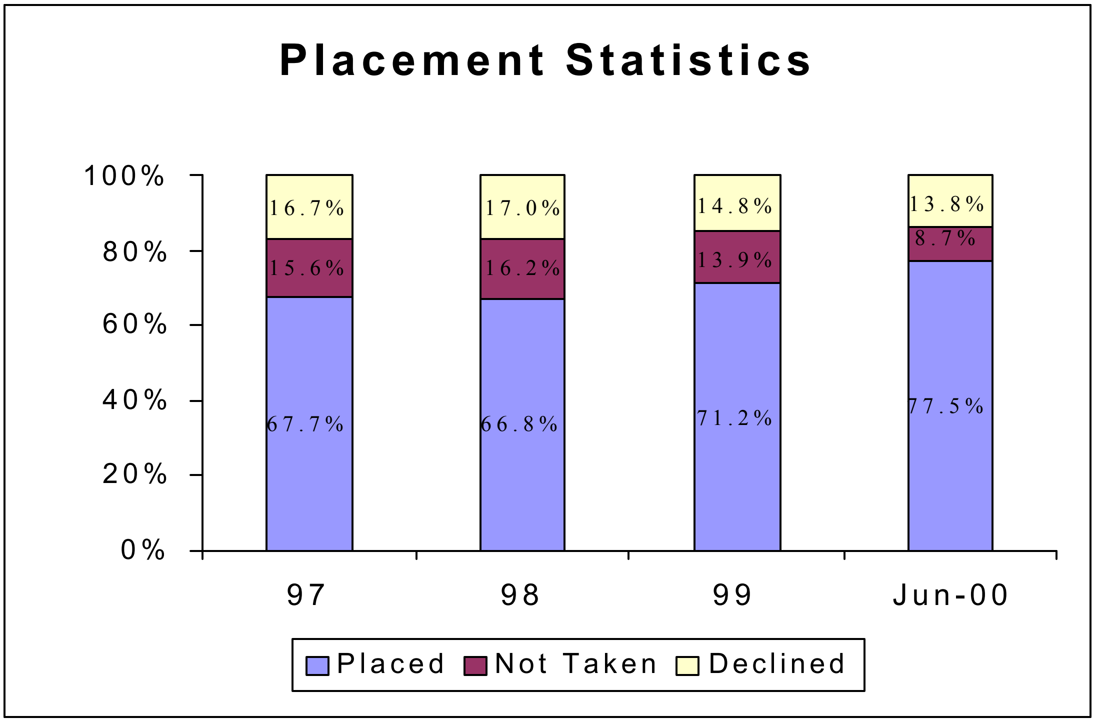
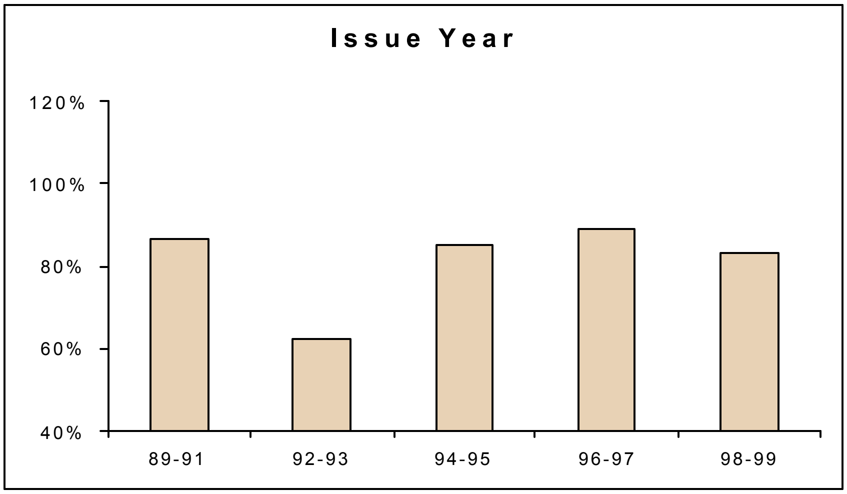


CHART 7
EXPERIENCE ANALYSIS



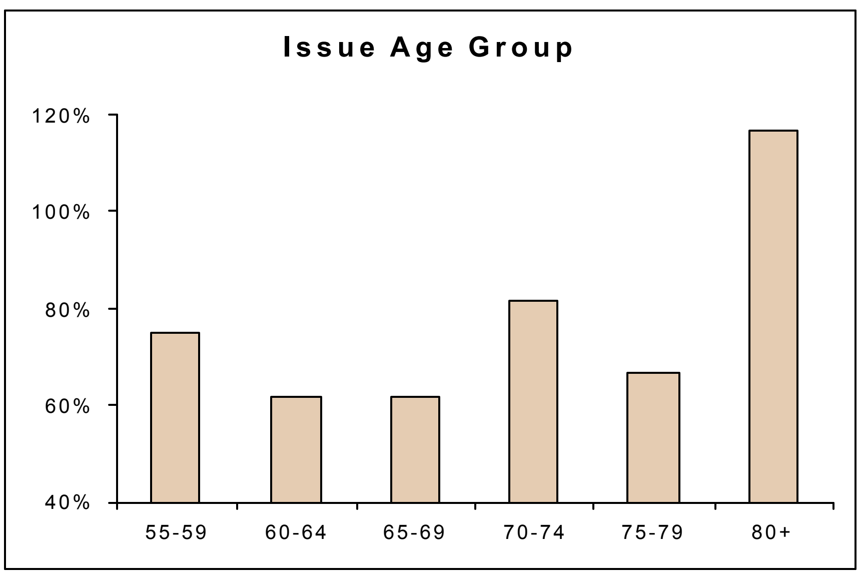
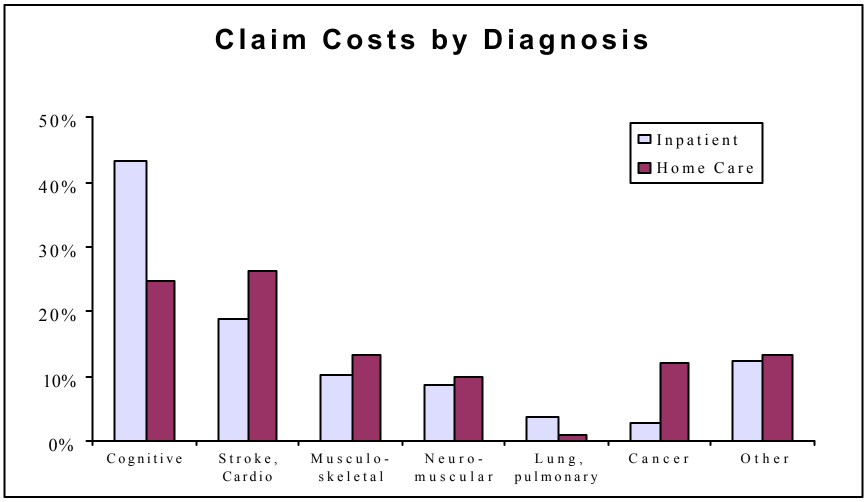


CHART 8


Claim Costs by Diagnosis
50%
40%
30%
20%
10%
0%
Inpatient
Home Care
Cognitive
Stroke, Cardio
Musculo-skeletal
Neuro-muscular
Lung, pulmonary
Cancer
Other

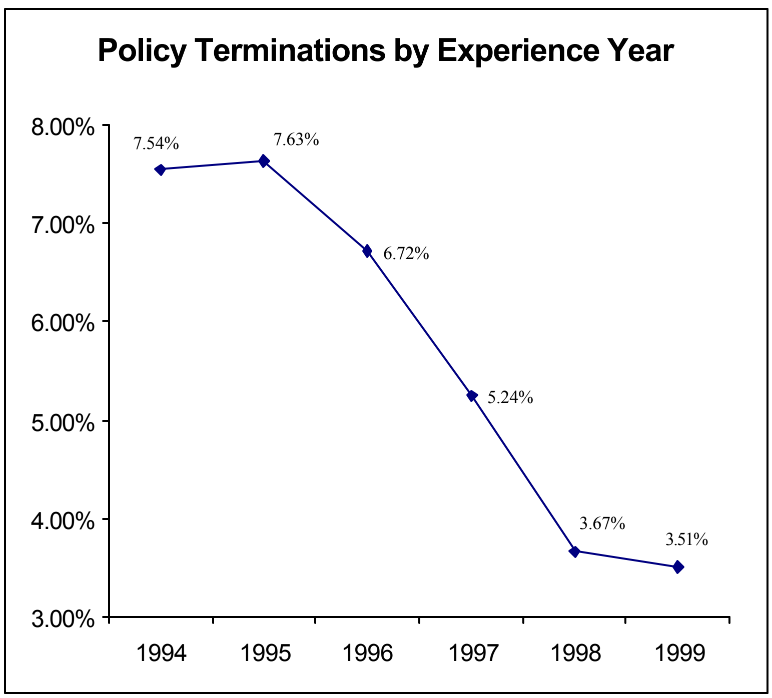

Policy Terminations by Experience Year
8.00%
7.00%
6.00%
5.00%
4.00%
3.00%
7.54%
7.63%
6.72%
5.24%
3.67%
3.51%
1994
1995
1996
1997
1998
1999

CHART 9
CLOSED CLAIMS BY DIAGNOSIS AND LENGTH
(BASED ON CLAIM COUNT)

	Percentage of Claims Lasting		
	Less than 6 months	**6 months to 2 Years**	**At Least 2 Years**
Cognitive	21%	42%	37%
Neuromuscular	20	60	20
Stroke, Cardio	48	30	21
Lung/pulmonary	78	11	11
Musculoskeletal	84	5	11
Cancer	81	19	0
Other	76	18	6
Total	59%	25%	16%