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Over the past couple of years, we have been involved with a number of major blocks of Long Term Care (LTC) business that have been the subject of actuarial appraisals. The blocks have ranged in size from a couple hundred policies (less than \$1 million of premium) to hundreds of thousands of policies (\$200+ million of premium). As these opportunities appear, an actuary can refer to a number of sources to guide him or her through the generic appraisal process. One source is ASOP #19, Actuarial Appraisals. Another source is an article recently published in the April 2001 Edition of the Health Section Newsletter, The Actuary and Health Insurance Mergers and Acquisitions by James T. O'Connor. This article provides a good roadmap to appraisals for health blocks of business.

So what is different about an LTC appraisal? And what issues should the actuary be focused on when appraising a block of LTC business?

Deciding to sell any block of insurance requires some planning and strategizing. Some of the questions that need to be addressed are:

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by James G. Stoltzfus

- What type of transaction works best for the parties involved?
- What company(ies) is a good fit for the business?
- What is the purpose of selling/reinsuring the block?
- What is the minimum price needed so as not to sustain a loss on a GAAP or statutory basis?
- What is the vision for the block?
- How will the sale affect expense margins on the remaining business?
- Will the company's distribution system need continued access to LTC products after the sale?

Answers to these questions are important to the planning process. Once this process has taken place, a decision can then be made to proceed with the actuarial appraisal.

The process for performing an appraisal on an LTC block is similar to that for appraisals of other types of products. LTC, however, is a long-tailed product. So there are some nuances and additional analyses needed with LTC appraisals compared to other health appraisals.

Some of the most critical analyses are described below.

- **Claims (A/E) Analyses** - Unlike most other health insurance products, when an LTC claim is incurred, the claim is expected to

run off over a long period of time, usually two or more years.

Therefore, in addition to thorough analysis of the claim incidence, an analysis of the claim runoff is also critical to the appraisal.

The typical appraisal uses company pricing claim costs as the underlying morbidity basis. Most companies have pricing claim costs by product, benefit period, elimination period, issue age, gender, and duration. Some companies break claim costs down further by type of benefit (nursing home, home health care, . . .), inflation option, and marital status.

These are then adjusted by actual to expected ratios (A/Es). At a minimum, A/Es should vary by product, benefit period, elimination period, issue age, gender, and duration. A/Es should be split into the following two components if the data is available: (1) the incidence rates of claims and (2) the continuation or termination of claims. Actual results are obtained from historical and current open claim files while expected should be calculated using the assumed morbidity. Studies should be broken down to provide as many categories or characteristics of coverage as possible, yet should not be so detailed as to detract from the credibility of the information.

Some critical breakdowns in addition to product, benefit period, elimination period, issue age, and duration are:

1. **Pricing Eras** - reflecting product and underwriting differences and revisions over time.
2. **Type of Benefit** - nursing home, home health care, waiver of premium, etc.
3. **Inflation Level** - whether the product contains inflationary increases and the type of increase.
4. **Gender and Marital Status** - marital status is definitely a factor that results in lower incidence and claim continuance while the insured is married.

Each one of these breakdowns can have a significant impact on morbidity.

- **Persistency Analysis** - This type of analysis is important for all appraisals, but is especially critical for LTC. The impact of a +/- 1% difference in lapse rates can have a large impact on the value of business, possibly as much as 20-30% of the value of the block.

Many older products and some more recent products have been priced based on lapse and termination experience from the 1980s. Termination experience today is a lot lower than the levels indicated by experience from the 1980s. Ultimate voluntary lapse rates (after 4-5 years) for a block can easily be running between 1-2%. The lapse rates also may vary quite significantly by issue age. In addition, experience studies imply a select and ultimate mortality table should be used. That is, mortality should be graded into some ultimate table, most likely the 1983 GAM mortality table, over a period of 3-8 years, which varies by issue age.

One possible implication is that many older products have been profitable in the past, but are moving into a period of lower future profitability due to the larger number of insureds at higher claim levels than originally priced for.

These are both critical analyses that should be performed when valuing a block of business. Other analyses are critical to the appraisal process but discussed in other literature.

There are several other crucial issues which must be considered with LTC. In many cases, answers to these issues are not clear.

- **Claims** - The projection of claims is usually the most critical issue when reviewing an appraisal. As mentioned earlier, the typical approach to projecting claims is to apply A/E's to expected claim costs by product, issue age, duration, benefit period and elimination period. Some of the key considerations are as follows.

If experience is worse than expected, should the appropriate action be to assume a rate

Will the trend of higher A/E's continue forever, or will the ratios track back towards expected levels in the future? Similarly, if low A/E's are being observed and the block is relatively young, is this due to a "miss" in the pricing assumptions on the selection factors, with the end result that ultimate claim costs will be attained, or will the favorable experience continue forever? The answer may be able to be determined from the pattern shown in the A/E analysis and the credibility of the data. Some judgment is involved. A company with over ten years of credible data should have a clearer picture on this compared to a company that is relatively "young" in the market.

How do the company's claim costs compare to the reviewing company's claim costs or to industry levels?

These questions only touch on some of the issues related to reviewing projected claims. The most helpful tools are a detailed A/E analysis and claim cost comparison. But other tools and

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increase? Perhaps this is appropriate on older plans if the loss ratios are higher than assumed in pricing. However, with the new NAIC rate stabilization measures, a rate increase may be detrimental to the company's business plan.

review methods are helpful and should be used to provide a reasonable comfort level with the projection.

- **Policyholder Persistency** - Because persistency experience has been emerging at higher levels (lower terminations) than originally included in many

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pricings, it is important to gain a high degree of comfort with the assumptions for future terminations. Some companies are tracking mortality versus voluntary terminations on their systems. As mentioned earlier, the mortality component of terminations is much lower than 100% of assumed mortality tables in early durations, suggesting select and ultimate mortality. But, lapses and other terminations are emerging lower as well.

The most important tools to review are company termination studies and industry termination studies. It is important to recognize the impact on lapses of conversion programs, either formal or informal, and of rate increases. Both of these tend to shock the lapses for a period of time and distort the analysis if the study is for a short period of time, i.e. one to two years.

- **Claim Reserves** - The claim reserve runoff is typically another critical area for review. Claim reserves consist of IBNR, LAEs and the present value of claims incurred but not paid yet. How are the reserves calculated? Do they include interest discounting? How are the claim termination A/Es compared to those assumed in pricing? Do the payment streams recognize the specific policy benefit payable to the insured? Do the reserves account for waiver of premium if applicable on the policy? How do the reserves handle the possibility of a claimant moving from one type of care to another on an integrated plan?

- **Sales Force/ Distribution Method**

Another issue that arises is the review of agent commissions and the sales force. Will the insurer's distribution system be used? How will that benefit the company acquiring the business? Are there agent loyalty and retention issues which need to be factored in?



Are commissions advanced to the agent? Is there a chargeback provision which is applicable? If you expect the agents to leave, are commissions vested? Are commissions paid on premiums waived?

- **Underwriting** - The level of underwriting is always an issue.

Underwriting protocols vary dramatically by company and by when the policy was issued. For existing business, this issue is captured in the A/E analysis for the most part. However, to the extent new business is being considered, the actuary needs a high comfort level with the underwriting and applications being used in order to project new business reasonably.

Also, the new LTCI Model Regulation requires review of the company's underwriting practices as part of the rating process. This should be considered, at a minimum, for any new business analysis.

- **Claims Administration** - Claims administration should

always be reviewed as well. This area is key to understanding claims reserves and how claims are processed. It is important to understand to what level claims, both initial and ongoing, are being investigated and validated. Since levels of care often change, it is critical to the claim reserve to recognize these changes along with other benefits to which the insured is due.

The new LTCI Model Regulation also requires review of administrative and claim practices as part of the rating process. This should be considered, at a minimum, for any new business analysis.

- **Statutory Valuation**

Assumptions - Statutory valuation methods are generally not an issue. Older products are typically reserved on a two-year preliminary term (PT) basis for statutory accounting. Products issued since 1990 are typically reserved on a one-year PT.

Most of the issues and questions arise with regard to assumptions. Statutory valuation assumptions

typically vary by company. The variations are generally (1) the use of pricing claim costs (including selection), (2) the level of loads included in the morbidity, (3) the level of voluntary lapses, and (4) benefits being reserved.

- **Tax Valuation Assumptions** - Tax valuation methods, similar to statutory, are by themselves not an issue. Methods are spelled out in the tax code and companies follow these. However, tax valuation methods can have a large impact on future expected after tax profits for LTC business. This is particularly true when products are reserved on a one-year PT basis for statutory accounting and a two-year PT basis for tax accounting. On more recently issued business, tax valuation interest rates have been approaching statutory valuation interest rates. On tax-qualified issues (which is a large portion of many companies' recent blocks), the reserve methods are the same between statutory and tax, so that the impact is reduced some.

Tax valuation assumptions are generally identical to statutory valuation assumptions with the exception of the discount rate, which is specified in the tax regulations and varies by year of issue only.

- **Taxation** - This is an issue for all appraisals. Some of the issues to consider are DAC tax, deductibility of the ceding commission, and type of transaction. A number of other issues can arise and should be reviewed carefully with tax counsel.
- **NAIC Model Regulation** - This has not been an issue yet but could arise. Some of the points were mentioned earlier. As part

of the rate stabilization provisions, if inadequate initial rates were filed, consideration should be given to the rate increase limits, guaranteed conversion options to other products, and

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rate increase notification requirements. In addition, if a company has had a history of inadequate initial premiums, potential state actions should be considered. It should be noted that the Model Regulation provides assuming companies a two-year "window" in which to get all necessary rate increases filed and approved without needing to disclose the rate increase on the assuming company's own Personal Worksheet. Therefore, the effect and timing of any needed rate increases on the assumed business must be carefully evaluated.

- **Reinsurance** - Usually reinsurance treatment is fairly straight forward. Issues can arise in assumption reinsurance if the

terms of the existing arrangement(s) need to be revised.

- **Appraisal Discount Rates** - This is a critical assumption and an important consideration in all actuarial appraisals. Discount rates will vary by type of business and should reflect the buyer's and seller's views on the risk involved and return desired.

As you can see, many issues can and do exist in performing an LTC appraisal. Some will be dependent on the specific transaction, some are LTC specific, while others should be routinely considered. As stated in Mr. O'Connor's article, appraisals demand a "high level of expertise and dedication to meet the demands of buyers and sellers and simultaneously comply with actuarial standards of practice." The key is to understand all of the issues, specific to LTC and general appraisals, and gain a high level of comfort with the analysis.

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