EXHIBIT 9

MR. WILLIAM F. BLUHM: My remarks will address one element of the top half of Exhibit 9: Additional, or Contract Reserves. I will begin with a few comments on the NAIC model minimum reserve standards, then bring you up to date on some of the changes in the draft NAIC rating model since it was exposed for comment. I will then present to you a new reserve methodology, which I intend to soon present to the profession through a paper that I am currently completing. It involves some concepts that I believe are important, new, and relevant to some of the social and public policy issues now facing us.

To start with, let's review some of the operative wording of the NAIC Model Law on Minimum Reserve Standards:

NAIC Minimum Reserve Standards
Section 4: Contract Reserves
A. General

1. Contract reserves are required, unless otherwise specified in Section 4A(2) for:
   a. All individual and group contracts with which level premiums are used; or
   b. All individual and group contracts with respect to which, due to the gross premium pricing structure at issue, the value of the future benefits at any time exceeds the value of any appropriate future valuation net premiums at that time. The values specified in this Subparagraph (b) shall be determined on the basis specified in Section 4B.

2. Contracts not requiring a contract reserve are:
   a. Contracts which cannot be continued after one year from issue; or
   b. Contracts already in force on the effective date of these standards for which no contract reserve was required under the immediately preceding standards.

3. The contract reserve is in addition to claim reserves and premium reserves.

4. The methods and procedures for contract reserves should be consistent with those for claim reserves for any contract, or else appropriate adjustment must be made when necessary to assure provision for the aggregate liability. The definition of the date of incurral must be the same in both determinations.

Note most especially that the old "Policy Type A, B, C, or D" no longer exists. Rather, there is a new requirement based on the existence of "level premiums." (By the way, part of my discussion will focus on convincing you that "level" shouldn't mean what it has meant in the past).

Aside from the net factor method described in the conventional way, there is additional, important wording contained in the scope paragraphs of the introduction:

> Section I. Introduction
>
> With respect to any block of contracts, or with respect to an insurer's health business as a whole, a prospective gross premium valuation is the ultimate test of reserve adequacy as of a given valuation date. Such a gross premium valuation will take into account, for contracts in force, in a claims status, or

> in a continuation of benefits status on the valuation date, the present value as of the valuation date of: all expected benefits unpaid, all expected expense unpaid, and all unearned or expected premiums, adjusted for future premium increases reasonably expected to be put into effect.

The practice of gross premium valuation is critical to appropriate contract reserve levels but is not universally followed. I have found that, generally, insurers that are currently active in individual medical insurance do address this issue, while those that are not very active in individual medical often do not. Small group insurers tend to ignore it as well, although at least one leading small group medical carrier has told me it does hold durational-based policy reserves of some sort. Fortunately, for companies that are not active in these markets, such blocks of policies are usually not a major part of their portfolio, and tend to shrink every year.

The choice of assumptions involved in such a gross premium valuation is very difficult. It involves an evaluation of a number of items that are difficult to quantify, including:

- "Future premium increases reasonably expected to be put into effect." (NAIC Model wording).
- The impact of cumulative antiselection, or continued durational deterioration.
- The impact of future cost trends, and their interaction with the first two effects.

The Academy Committee and the Exposure Draft

You may recall an exposure draft of a proposed new NAIC model rating regulation for individual health insurance. That draft proposed the use of "pre-filed" or file-and-use rate increases, under specified conditions. It was believed that such a regulation could go a long way toward helping insurers to evaluate (and work within) the risks of the individual insurance market. It is relevant to the valuation actuary for two reasons:

- First, its impact on the prospect of future rate increases, and the ability of carriers to manage the business, will impact the gross premium valuation reserve calculation.
- Second, it creates a brand new liability: the Regulatory Liability. This liability is not intended to help ensure solvency. Rather, it can be thought of as a bond, being pledged by the carrier to guarantee performance of meeting the minimum loss ratio.

There have been a number of changes made to the draft over time. The NAIC Life and Health Actuarial Task Force has recently set up a subcommittee to take over the drafting of the remaining changes it wished to see incorporated. Among the biggest issues still remaining are:

- At the Task Force's request, the Academy committee included a limit on the allowable size of rate increases that could be implemented within the pre-

filing guidelines. That limit was 60% in any one year, 100% over two consecutive years, being comparable to the rules used in New York. The Task Force was unsatisfied with this limit, and will likely be lowering it in its next draft.

- At least one member of the Task Force felt that all individual medical policies should be made guaranteed renewable. The Academy committee felt inclusion of this provision would be counterproductive to the intent of lowering insurer risk.
- The Task Force seems unable to decide whether it wishes to view the "loss ratio guarantee" included in the prefiling guidelines to apply to year-by-year loss ratios or to cumulative loss ratios. This is equivalent to deciding whether the insurer or the insureds should take the risk of deviations in lapse rates from those in the anticipated loss ratio calculation.
- There is one member of the Task Force who seems unwilling to let go of the concept of Benefit Ratio Reserves, and has repeatedly tried to include them as a part of the premium model regulation.

The Task Force is trying to cope with one overriding concern: to deal with the large premium rate increases that can result from durational deterioration of experience. This is perceived by the public and by regulators as being tied up with the problem of the

uninsured, as well. The reserve basis, which I will now describe, is one way in which I believe the problem can be reduced or eliminated.

Durational-Based Policy Reserves

Durational deterioration of claim experience has been observed for some time in the individual and small group medical insurance markets, as well as in others. There are a number of possible methods and models that can be used to measure and predict this effect. Regardless of the method used to predict it, however, I believe the deterioration of experience is generally predictable. Further, I believe deteriorating experience can be prefunded through a contract reserve methodology I have termed "durational-based policy reserves (DBPR)."

There are two separate aspects to the DBPR methodology, which significantly deviate from past practice:

- First, it involves classical methodology of taking present values of future benefits adjusted for aging of the insured, but then adds two new factors to the calculation.
- Second, it provides a suggested methodology to adjust for cumulative antiselection.

EXHIBIT 9

Actuaries have long recognized the lower expected costs at early durations for newly underwritten business. This has been true of all coverages that can be medically underwritten: life as well as health. Claim costs in this early "select" period were expected to increase over time, then level off to an "ultimate" level. Experience studies were often structured to group all experience beyond the select period into one experience category which ignored policy duration.

More recently, there has been increasing awareness of longer-term durational effects, in both the individual and small group medical markets. There has also been some interest from other markets with similar characteristics, such as individual term life insurance. There are two characteristics that are common to all the various markets:

1. Insurers have adopted a "select-and-ultimate" pricing methodology. That is, their premiums in each year are set to a level adequate to fund only the claims expected in that year. There is no built-in element of premium to pre-fund the effects of durational claim deterioration. Because of this, the increase in year-to-year premiums substantially exceeds the increase which would result only from trend and aging.

   In the small group market, versions of this methodology are called "durational" rating or "tiered" rating. Durational rating uses rate schedules

that increase by policy duration. Tiered rating is a limited form of experience rating, where a group is assigned a rate level, or "tier", based on prior experience. Tiered rating creates rates that tend to increase over time and has an impact similar to durational rating.

2. The second characteristic of such markets is that lapse rates are relatively high, indicating a material portion of the insured population is mobile, and does in fact "shop" their business.

In the small group market, the employee group is "shopped" as a group. To the extent the group is underwritten as a group, based on average expected costs, a given insured's higher than expected costs are averaged over the group. This makes the ability of individual insureds to antiselect more limited than in the individual insurance market, and thus limits the ability of the groups to antiselect. On the other hand, small group policyholders tend to be more mobile, more aware, and more sophisticated in their purchasing decisions, causing greater antiselection. These two effects act in opposition to one another.

Select and ultimate rating methodologies have two notable interesting results:

1. Rate levels on renewal business quickly rise significantly above the first year's select level, making it advantageous in renewal years for select risks to find alternative coverage elsewhere, where they can requalify as a select risk.

2. As the select risks leave the rating pool, they leave behind the nonselect risks whose risk profile has deteriorated since they originally joined the pool.

I would suggest that one of the fundamental concepts of insurance is the pooling of homogeneous risks, with the subsequent low utilizers of medical care subsidizing the high utilizers. In individual and small group health insurance, a group of new policyholders has presumably been well underwritten, and can be thought of as a homogeneous group who are sharing not only the risk of this year's claims, but also the risk that their health will deteriorate to a predictably high cost state.

It could be argued that membership in the original pool, and the resulting expected subsidy of those whose health deteriorates by those whose health doesn't, was part of the guarantee being purchased by the insured. To the extent the select-and-ultimate pricing methodology induces the healthier members of that pool to lapse, they are no longer paying premium to help subsidize the unhealthy insureds on a year-to-year basis. I suggest that this can be considered to be an abrogation of the guarantee originally provided, especially to those whose health has deteriorated.

A solution to the problem would seem to be to have the original group of insureds prefund the deterioration expected to occur within their group. In that way, the experience of the

group won't be hurt by having the healthier lives leave the group, since they will have already provided their contribution to health deterioration in advance. Durational-based policy reserves (DBPR) provide a mechanism for the lapsing healthy lives to prefund (during the time they are active) their subsidy of the unhealthy lives they leave behind in the group. This occurs through a specific assessment made during the early durations, which is set aside to subsidize the experience of the later years.

Conceptually, the DBPR can be considered as similar to classical "policy" reserves (or "contract" or "additional" reserves). Rather than prefunding of the claim curve due to the aging of the insured, however, as classical policy reserves do, the DBPR prefunds the aging of the insured's coverage.

Let's take a look at the impact of the aging of coverage. I have created an example using individual medical policies. (The same principles hold true for the coverage of individuals in a small group). If the aging of the insured's coverage is included as another element of the rating and reserving process, it can be seen to be one of three factors which tend to contribute to the increasing cost of medical claims over time:

1. The aging of the insured.
2. The aging of the insured's coverage (or durational effects), and

3. The increasing trend of claim costs by calendar year, to the extent it grows more quickly than the gross premium level. (After accounting for the compounding effect of all three factors on trends).

Chart 1 shows the claim cost curves that result from the aging of the insured only, from the aging of the insured and his or her coverage, and from all three causes (listed above) for a sample policy issued to a new individual insured at age 25.

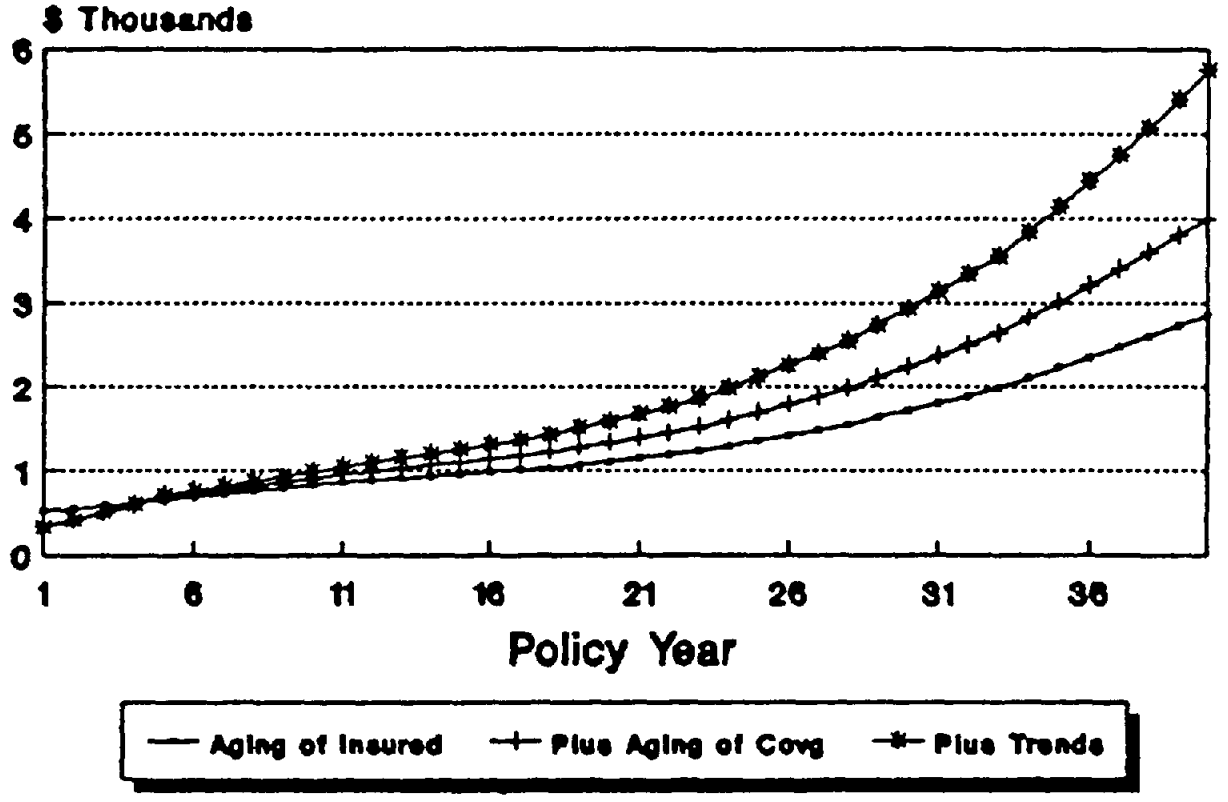
The first curve represents the type of claim costs underlying today's reserve methodology, and are based on typical age/sex factors.

The factors used for the aging of the insured's coverage are illustrative only, taken from "Cumulative Antiselection Theory" (*Transactions* of the Society of Actuaries, Vol. XXXIV) or "CAST."

I'd like to also point out there are a number of research projects currently under way by the Society of Actuaries to study and measure the effect of duration on individual and small group claim costs. When these results become available, they should prove useful in choosing durational factors.

CHART 1

PER POLICY CLAIM COSTS



The third curve was developed based on two trend assumptions. The first was the assumed trend rate of claim costs. This trend rate is based on the assumed underlying trend in medical costs and includes the leveraging effects of the deductible and stop-loss provisions. The second trend rate is the rate of premium increases, which probably ought to be limited to something less than the rate in claim costs. For purposes of this illustration, I have assumed a claim cost trend rate of 9% and a premium trend rate of 7%. (These were intentionally chosen as being unreasonably low, as will likely need to be the case to satisfy regulatory authorities that rates are not being set artificially high in developing rate increases). The results are highly leveraged by the difference between these two rates, as well as by the ultimate lapse rates.

Based on the obvious, material impact of the durational and excess trend factors, and on the problems insurers have had in successfully managing these blocks of insurance, I would like to put to you a hypothesis for your consideration:

> Hypothesis:
>
> Aging of coverage and the excess of trend over premium increases are factors which are appropriate for prefunding, in the same way as prefunding of the aging of insureds.

This hypothesis has a significant impact on additional reserves. The hypothesis implies that even attained age policies are "level premium" policies in some sense, and should require policy reserves, since it is highly unlikely under most scenarios that future premium increases will be sufficient to cover all three causes of increasing claims.

To the extent the trend and durational effects do exist and are ignored in current practice, they are not being prefunded. This is equivalent to an assumption that future premiums will be increased to account for the increases in claim costs, at levels far exceeding the underlying cost trend. This can result in strong CAST effects, leading to a possible classic assessment spiral.

This principle has already been adopted in some circumstances by the profession. As a reference, I would point you toward the Actuarial Standards Board's Actuarial Standards of Practice No. 3, Relating to Continuing Care Retirement Communities.

In addition, however, I believe there is a significant question of whether a premium structure that uses future premium increases to fund durational deterioration is really an abrogation of the insurance principle.

Chart 2 translates the three claim cost curves into terminal net level reserve factors. This demonstrates clearly the large difference in policy reserves that result from durational and trend effects. It also includes an additional curve, named "classical." This represents the reserve factors that would be the result from the same assumptions as the first (age only) curve, but with no lapses, and two-year preliminary term methods.

I should also point out that the DBPR curve (labeled "A + D + Trend") can vary quite significantly due to relatively small differences in assumptions. This is especially true regarding lapse rates and the cost trend/premium trend differential. The reserve factors illustrated here only represent a 2% annual deficiency in future premium increases.

Chart 3 illustrates the aggregate reserves held by an insurer under the same four reserve bases. The DBPR in this example is somewhat lower than the statutory reserve at the medium durations, but it is higher at the later durations. If this policy were on an attained age basis, the differential would be even more naked, since tabular reserves wouldn't be held under current standards, under most actuaries' definition of "level premium."

The reserve calculations used in DBPR reserves are a step closer to a gross premium valuation method, in that lapses, claim trends, and durational effects have been included.

CHART 2

TERMINAL RESERVE FACTORS

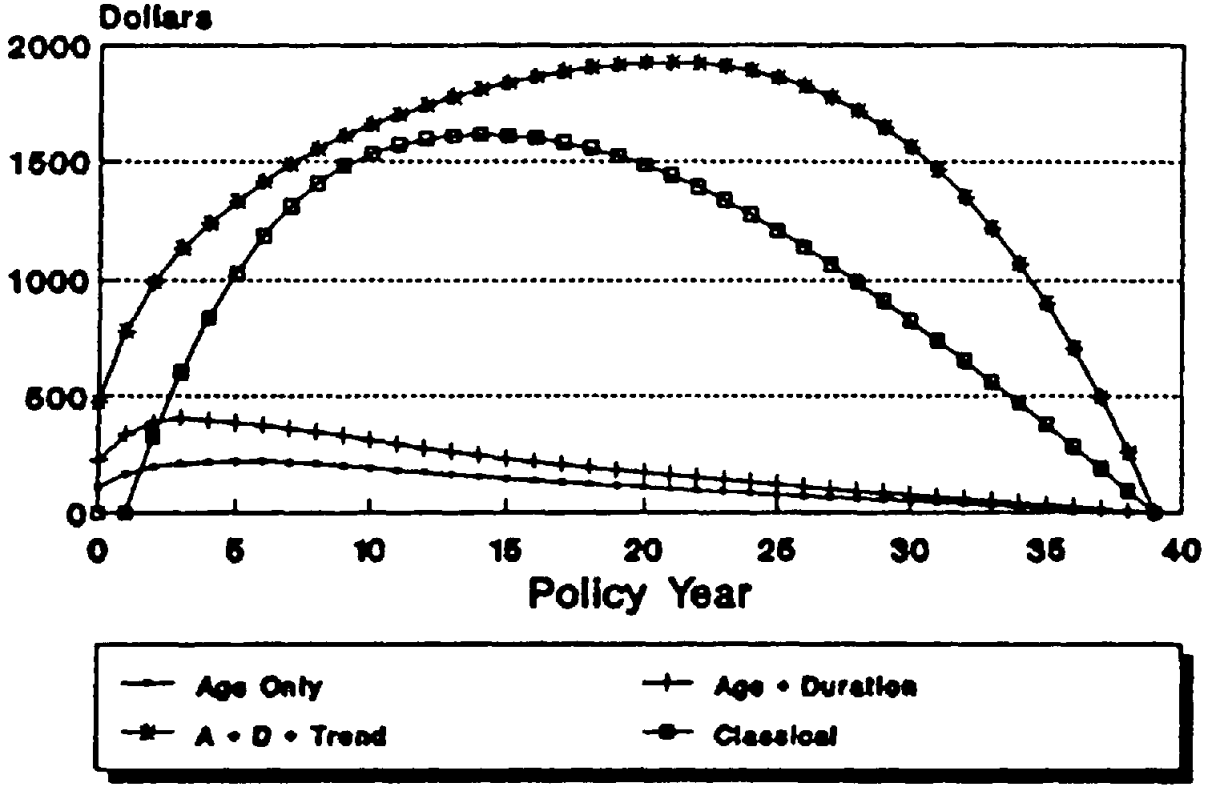
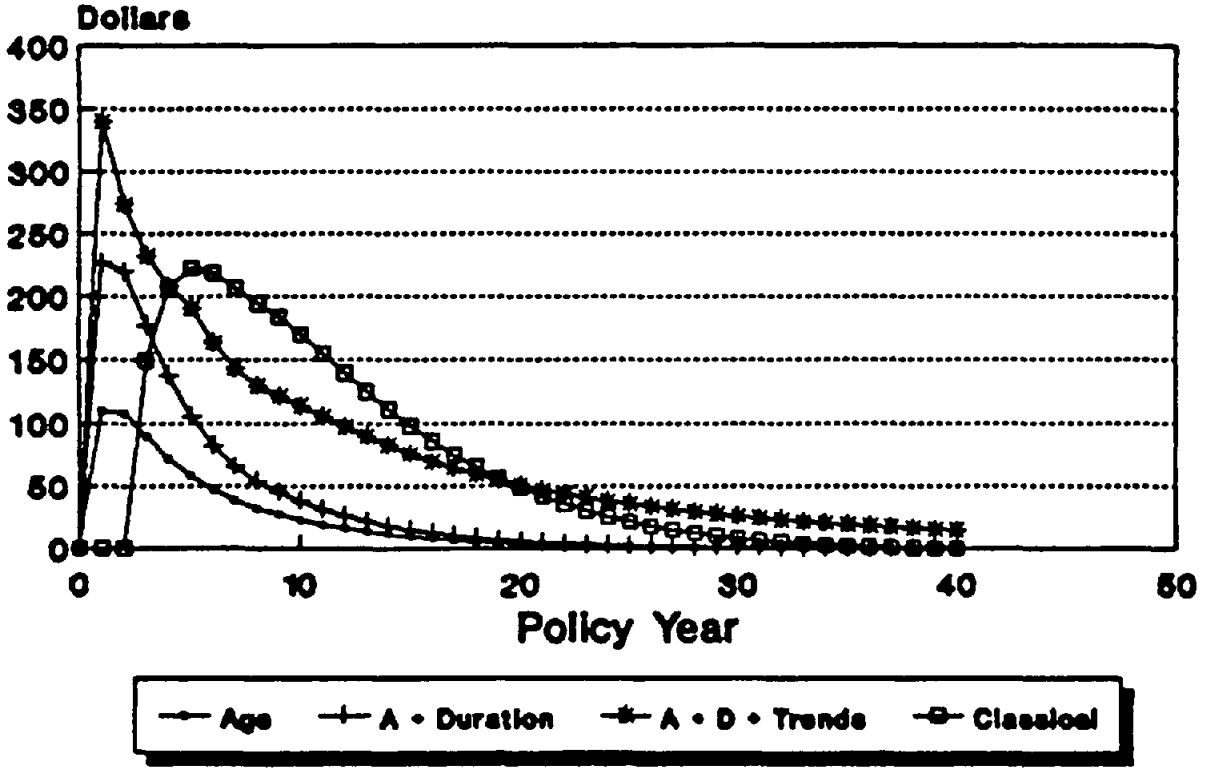


CHART 3

AGGREGATE RESERVES



That comprises the first of the two areas where DBPR deviates from past practice. The second involves the following fundamental premise:

> When lapses are higher than those assumed in the original reserve calculations, the reserve factors to be used in years after issue should be increased to offset those excess lapses.

Thus, if all other reserve assumptions are proven to be accurate, the impact of lapses higher than expected will be to leave aggregate reserves where they would have been if actual lapses equalled expected lapses. This methodology will cause the excess lapsing (healthier) insureds to leave behind some funds for the benefit of the persisting (sicker) insureds, rather than having those reserves release into the carrier's profit stream.

This methodology will not necessarily produce accurate prospective reserves under the gross premium valuation methods, but it will produce larger reserves per policy, which might be considered an approximation for the antiselective nature of remaining policyholders. It is consistent, though, with a retrospective calculation reflecting the insuring principle of all members of the pool sharing in the future deterioration of that pool.

This methodology is not intended to replace the gross premium valuation. It is intended to replace current factor methods and the current lack of standards for attained age policies with more adequate and reasonable minimum standards.

Conclusion and Public Policy Implications

I believe the adoption of DBPR (or an equivalent method) as a required valuation method would alleviate two major problems in the small group and individual major medical market today:

1. It would reduce or eliminate the problematic durational pricing strategies required for competitiveness in today's market, and
2. It would force the prefunding of claim deterioration over time, or cumulative antiselection, in that all original entrants to the block would be required to set aside money (as reserve liabilities) to subsidize the future health deterioration of those who become uninsurable.

Based on the hypothesis that the originally insured pool shares not only the risk of a given year's claims, but also the risk that its health will deteriorate to a predictably high-cost state, it seems appropriate to have a mechanism to prefund that deterioration of the pool.

DBPR reserves can place considerable surplus strain on insurers writing large volumes of new business and would likely result in substantially higher premiums. For this reason, voluntary use of DBPR reserves is unlikely. I therefore propose to you that the DBPR methodology is an appropriate modification to the statutory valuation standard.

I would also suggest to you that the prefunding required by DBPR is based on a reasonable and responsible public policy position and would produce socially desirable results. If you find yourself thinking about these reserving concepts in the future, I would ask you to think about them from the point of view of their possible impact on the market in a social sense, as well.