Proposed Health Reserve Standards – A Dissenting Viewpoint

by Robert Shapland

Late in 1983 the American Academy of Actuaries Sub-committee on Liaison with the NAIC Accident and Health (B) Committee accepted the task of developing new reserve standards for health insurance, in response to a request from the NAIC (EX5) Life and Health Actuarial Task Force.

This subcommittee's efforts have resulted in three draft proposals, all widely exposed for comment, and each of which has generated much controversy. The latest draft is being considered for adoption by the NAIC.

My comments here focus on the proposed standards for individual policy reserves.

A given policy reserve formula inherently assumes some underlying rating principles and practices as to the matching of revenues and expenditures, especially the matching of premiums and claims. Much of the controversy generated by this subcommittee's policy reserve proposals has occurred because of the conflict between the rating principles and practices, which underlie the proposals, and those used by many actuaries and insurers.

A wide diversity of rating principles and practices are used by health insurers today. Numerous approaches exist to set initial and renewal premium rates under policies where (1) insurers retain the right to change premiums after issue; and (2) claim costs will increase as the insurance maturing.

Claim costs will increase after issue due to aging, wearing off of the impact of underwriting selection, inflation, and anti-selection by continuing policyholders. Both predictable and unpredictable increases in claim costs can be addressed by a wide range of rating practices, including:

1. The short-term morbidity approach, where initial premiums are calculated to cover claim experience for a short period, such as one year, while future premium rates are set to cover future claim experience.

2. Various longer-term approaches, where initial premium calculations recognize some or all of the anticipated trends due to the causes listed above, as well as to enhancements in medical care. Here, insurers might attempt to calculate initial premium rates to cover claims for several years, even to age 65. Or, initial premiums may fund only some of these expected increases over such periods, while relying on later rate increases to cover the rest of the extra costs.

Note that under any of these rating practices, there can be recognition (or not) of past claim experience margins or losses in setting renewal premium rate levels.

An insurer's choice of rating practices, which set forth how to calculate initial and renewal premiums, is based on several considerations:

- the method's ability to cope with changing costs;
- its impact on the insurer's competitive position;
- the comparative risk of loss for that method;
- the degree to which the developing rating pattern might create a deteriorating risk pool; and
- equity between short-term and long-term policyholders.

While each insurer is free to choose its rating practices, legal restrictions exist in the form of state laws that require premiums to be "reasonable in relation to benefits," where "reasonableness" is measured on the basis of anticipated loss ratios.

Depending on the state, anticipated loss ratios are measured:

1. prospectively only over the remaining policy life;
2. prospectively only over the rating period for which premiums are calculated;
3. over the entire policy lifetime; or
4. over the current "rating period," including both the retrospective and prospective portions.

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Because of the diversity of state rate regulations, an insurer’s rating practices can vary by state as well.

Among the several perspectives applicable in developing policy reserve standards, the major one is that these reserves represent the shortfall of future revenues, including future premiums, in meeting future expenditures. In turn, future premiums and their relationship to future claims will depend on the methodology used in their determination, that is, on the insurer’s rating practices.

Because of the diversity in methodologies used to determine renewal premium rates under a given experience scenario, as noted earlier, it follows that policy reserves for a given coverage could differ considerably, both by insurer and by state.

The AAA subcommittee’s initial policy reserve proposal called for retaining the tabular reserve approach for benefits involving stable and predictable claim costs. For other benefits it visualized only the “lifetime” rating methodology, whereby insurers attempt to realize a premium revenue stream which reproduces their target loss ratio for aggregate experience over the life of the policy form. Under this method, retrospective claims experience below the target loss ratio lowers future premium rate increases in order to produce offsetting prospective loss ratios above the target.

Policy reserves based on this rating concept were labeled “benefit ratio reserves.” Net level benefit ratio reserves are initially equal to the excess of the lifetime target loss ratio portion of past premiums over past claims, on a present value basis. As experience develops, the target loss ratio is replaced by the actual anticipated lifetime loss ratio based on past actual and anticipated future experience. These net level reserves are subject to a preliminary term adjustment.

After a round of comments and revisions, this initial proposal was modified by exempting “non-leveling” premium policies from policy reserves altogether, as opposed to recognizing additional reserving methodologies related to alternative rating periods and methods. In this context “leveling premiums” are defined as those that make advance provision for claim costs beyond the year to which the premium applies. This negative approach, through exemption, continues to ignore rating practices between the lifetime method and the short-term or YRT methods.

Because of its proposed benefit ratio reserve approach, the subcommittee is indirectly suggesting that the “lifetime” rating practice is the only acceptable one where “leveling” premiums are used. I view that as inappropriately supporting the adoption of this rating practice as the sole, legally required practice.

In the final analysis, the latest proposal can be seen to contain two related major flaws:

1. It fails to properly recognize the impact of various renewal rating practices on policy reserve standards.

   In this connection note that the proposal allows pooling of forms for benefit ratio reserve determination based on criteria outlined in its Appendix B (Glossary). However, these criteria fail to require that within such pools, policy forms should be rated via common practices or be pooled for experience rating purposes, requirements that would seem primary if policy reserves were to be consistent with rating practices.

2. It attempts to install the “lifetime” rating approach by requiring policy reserves to be based on it. This second flaw raises special concerns because the charge given to this AAA subcommittee was to propose reserve standards, not to establish its choice of rating practices.

   If any subcommittee members feel that insurers should be barred from using other than the “lifetime” approach to rating renewable policies when incorporating leveling features into their rating practices, let them separately support rate regulations to accomplish that goal so that there is fair and appropriate debate.

   While I oppose the “lifetime” approach and could write even more on that subject, that is not the point I’m making. The point is that it is highly inappropriate for a committee charged with developing reserve standards surreptitiously to foster limitations on rating practices.

   Aside from this I see several other important problems created by these proposals:

1. The depiction of the benefit ratio reserve as being “simple” in spite of the complexity of the prospective portion of the reserve calculations once experience starts to accumulate.

   Insurers would have to predict the present value of future premiums and claims, which would then be combined with retrospective experience in determining a revised lifetime loss ratio. The revised lifetime loss ratio would then be applied against retrospective experience with the result being characterized as producing a “simple” valuation.

   2. The inappropriateness of using the lifetime loss ratio in calculating benefit ratio reserves even when the lifetime rating approach is in use.

   This problem results because the retrospective reserve calculations, when viewed in terms of their prospective equivalent, inherently assume that the portion of future premiums available to pay future claims is the lifetime loss ratio. Basic logic indicates that there is no foundation for this assumption.

   The portion of future premiums available to fund future claims is dependent on the amount left over after paying future expenses. Only coincidentally would be the complement of the lifetime loss ratio. For example, if the lifetime loss ratio is determined to be 20%, it is unlikely that 80% of future premiums will be needed for future expenses.

   3. Basing policy reserves which represent prospective obligations on retrospective experience creates a basic anomaly. The worse the retrospective claim experience, the smaller the policy reserves, and vice versa. This effect is dampened by applying a reevaluated lifetime loss ratio to the retrospective experience, but it still exists.

   Unless a reserve proposal for health insurance recognizes (1) the relationship between “reserves” and “rating principles and practices,” and (2) its prospective nature, I see it as failing to meet fundamental tests. Therefore, I suggest that the current proposal be amended to focus on prospective valuation with recognition of the impact of the wide range of rating principles and practices in use on this valuation.

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In Memoriam
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