



AMERICAN ACADEMY of ACTUARIES

To: Mike Batte, Chair, Accident & Health Working Group
From: Medicare Supplement Work Group of the American Academy of Actuaries
Re: Medicare Supplement Refund Formula

The Academy of Actuaries appreciates the opportunity to comment on the issues raised by the Reden & Anders report to CMS, *Study of Alternatives for the Medicare Supplement Refund Formula*, dated December 2, 2002 and the outline of issues prepared by Frank Dino, *Medicare Supplement Refund/Credit Calculation Methodology*, dated April 30, 2003 (Appendix A). Our comments will be from two viewpoints:

1. The conceptual framework for pre-determined benchmark criteria from which the refund would be calculated.
2. The Academy's two reports of Medicare Supplement experience, dated June, 2000 and February, 2002.

The American Academy of Actuaries (the Academy) is the public policy organization for actuaries practicing in all specialties within the United States. A major purpose of the Academy is to act as the public information organization for the actuarial profession. The Academy is non-partisan and assists the public policy process through the presentation of clear and objective actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification and practice and the Code of Professional Conduct for all actuaries practicing in the United States.

The Academy Work group that completed the recent review of Medicare Supplement experience was asked by the AHWG to review the Reden & Anders report and offer comments. The members who continued as participants in making these comments are listed in Appendix B.

Conceptual Framework

The original benchmark values were determined without any experience from standardized plans or the effects of open enrollment. This refund calculation was developed in a very short period, as required by OBRA '90, and there were no regulations pertaining to refunds prior to its development. For example, it was unclear whether multiple formulas and cumulative benchmarks were acceptable¹. Both were accepted –

¹ Note that in most situations where there is a federal law, there are federal regulations that provide details on acceptable interpretations of the law. While OBRA '90 provided for HHS review and approval of the NAIC Medicare Supplement Model changes, that approval was in total without written comment on the refund formula's concepts. As the NAIC looks into revisions to the refund formula and when legislative

one formula for group and another for individual and cumulative experience is compared to cumulative benchmarks.

The general approach seems to have served well over the past ten years. Industry loss ratios are above benchmarks. An occasional refund is required. The Reden & Anders Report does not recommend wholesale changes. The assumptions behind the benchmark values are a single set with different “lifetime” loss ratios:

- “Lifetime” was set at fifteen years;
- A single set of assumed durational relationships of loss ratios was developed passing through 65% in year 3 for individual and 75% in year 3 for group;
- A single set of termination rates through 15 years was assumed;
- A single trend value was assumed for all years and all plans;
- First calendar year earned premium (equal to one half of first policy year premiums) was set as the base for cumulative premiums and claims using the above assumptions to produce benchmark loss ratios.
- A single set of tolerance values was established to reduce the potential for refunds being paid on non-credible results.

From an actuarial perspective, the conceptual development of appropriate benchmarks could reflect variations for more than the proposed rating basis (issue age vs. all other rating). An example would be to reflect the different termination patterns and durational effects by plan in developing plan-specific refund benchmark patterns. While this would be administratively too complex for the value of refunds to date, if margins are significantly reduced, it may become more important.

The determination of acceptable margins to replace those inherent in the initial values (current benchmark values) and the ability to adjust later years’ assumptions for differences in cumulative experience to date² (to reflect current premium levels versus those expected from the initial calendar year by the benchmark) should be important considerations in any revision to the refund calculations.

Additionally, variations that have been shown to exist in both Academy reports could modify certain aspects of the benchmarks to allow initial premium rates to better reflect current assumptions for these variations – e.g. durational loss ratio patterns, trend and persistency are different by plan as well as rating basis.

action will be required, this comment notes that the existing refund formula already makes several assumptions about the meaning of the language in OBRA’90 and no one has raised any questions about them. This may suggest that new refund formula assumptions could also be accepted under reasonable interpretations of OBRA’90 without further legislation.

² For example, the use of a single trend value creates an assumed pattern of growing premiums per in force which will not match actual experience. Smaller trend increases may make the later premiums smaller in proportion to the initial premiums than expected. Even matching the loss ratios by duration will not produce cumulative results sufficient to avoid a refund if all other assumptions were met.

Aggregating³ across plans without the ability to adjust for experience means that the formula's use of common assumptions is likely to produce minimal margins for certain Plans while providing much larger margins for other plans. Companies with different distributions will be treated differently. Companies whose plan distribution changes may need to revise their premium relativities to avoid having to pay a refund.

Aggregating will reduce the delaying effects of the tolerance values for companies with small blocks in many plans and states. This may have a benefit to policyholders. On the other hand, aggregation allows excessive premiums on plans with smaller numbers to be merged with above minimum loss ratios of the more popular plans. In addition, the use of a single set of tolerance values does not reflect the differences in credibility by plan that arises because of benefit differences – e.g. Plan A has a lower frequency of claim and greater variation by amount and Select credits to the standardized benefits will change the potential for variations from expected claims.

Simplicity and control of variations are valid reasons for foregoing recognition of many of these variations in actual practice. However, continued use or any change to the refund formula should be defined in a way that allows for adjustments when emerging experience indicates the revised approach is clearly not appropriate.

We recommend that the current assumptions for benchmarks be reviewed in light of the Academy's reports of Medicare Supplement experience. New assumptions consistent with different rating methods should be developed. This could require the use of a range of assumption values that varies by plan and rating method. New benchmark values for each of these sets could possibly be plotted to provide a way to develop a single set for each rating method.

Comparison of cumulative margins in the existing formula to margins in any proposed formula values will be critical to avoid adding a new risk to companies with in force blocks or with a distribution of new business that is inconsistent with the distribution underlying the formula values.

The rules should permit adjustments when actual premium levels as a multiple of the initial premium are no longer consistent with those underlying the benchmarks (based on trend and persistency variations) as well as the potential for development of innovations that do not fit well within the prescribed refund formulas. Premium level assumptions will need to be determined based on expected patterns of premium change (age – based on current rating method, trend in medical costs, etc.). Innovative benefits or new premium arrangements may create different patterns. Prescription drug riders, other innovative benefits and attained age rating with level rates after age 80 or duration 5 are just some examples of ways in which the pattern could become totally wrong for some portion of the Medicare Supplement product line. This may mean that new benchmark “sets” are needed from initial sales of a product or that some adjustment after initial use is

³ Proposed aggregation would create four benchmark sets. Two would have the same durational slope but cumulate to 65% or 75% for issue age rated policy forms. The other two would have a different slope for policy forms with other rating methods.

needed to provide fairness to both the policyholders and the insurer using a new approach.

Academy Reports of Medicare Supplement Experience

There were a number of recommendations in the Reden & Anders report and possible actions already discussed by the AHWG. This section will note how the Academy's reports would relate to each of these issues.

1. Allow offset of accumulations for cash values – the Academy is unaware of any such product and no experience was provided for any such product in either report. As noted above, any new proposal should allow for changes that could include allowing an offset. If this is done, then any current change does not need to address this.
2. Vary the benchmark values based on rating methodology – the Academy's report notes different patterns of persistency for issue age rated products than for attained age rated products and by plan type. The report also notes somewhat different issue age patterns for all rating types. The use of age 65 as the original issue age is clearly inappropriate based on the Academy report. Using several different issue ages and the resulting aging patterns should be done as part of the plotting suggested. Benchmark durational values may need to reflect different presumed aging values.
3. Change the slope of the durational loss ratio curve – the Academy's report can provide useful variations in some of the critical assumptions including variations by plan and/or rating methodology. Variations in trend, while critical to premiums, should be based on long term likely values. Tests for the effects of different plans could use different levels once a common "underlying" trend is defined. It should also be recognized trends can and will vary over time. Also, it should be noted that the Academy's report did not review the experience of the drug plans and we expect that the trend and slope of these plans would be affected by the differences in prescription drug costs versus other Medicare Supplement benefits. The results should be developed without regard to when, within the defined lifetime, the loss ratio for a specific year equals or exceeds the lifetime value.
4. Plan aggregation – combining plans with common rating methods, as noted, does not mean that the aggregated results uniformly provide fair benchmarks. The value of reducing the impact of the tolerance values is a policy decision. Allowing some adjustment for premium levels may be sufficient to offset the potential inequity of aggregation. Combining all plans may not be needed, whereas combining certain plans together would improve credibility while allowing for appropriate premium patterns to be reflected.
5. Simplify refund calculation – The Academy supports analyzing the effect of simplifying the refund formula where appropriate based on experience of standardized business.
6. Third year loss ratio requirement – Changed benchmark requirements reflecting plan and/or rating method would imply modifications to the 3rd year loss ratio

- requirement. It has been suggested to 1) remove the requirement, or 2) set it at the duration where the revised loss ratio curve would exceed 65%. Either of these approaches would be consistent with rating methods meeting the benchmark loss ratios.
7. Tolerance parameters – the Academy has not studied the current tolerance values for their appropriateness. Credibility factors and 0% discounting provides for some tolerance. We do note that aggregation assuming a common level of credibility, results in full credibility being reached at an earlier duration. Different distributions of plans will not have the same credibility. It may be that some revision is necessary if plans are to be aggregated and the margins from cumulative results are significantly modified. Using the same tolerance values while both aggregating plans and reducing the margin from the level in the current refund formula is likely to significantly increase the risk of inappropriate refunds based on statistical fluctuations. It is the combination of the margin in the benchmark pattern (versus the different patterns from variations in plan, age distributions), the amount of aggregation across plans and the tolerance factors (which at this point only address statistical fluctuation within a common plan, rating basis) that will determine the acceptability of a revised refund formula. Reasonable assumptions in one area may enhance or reduce the reasonableness of assumptions in other areas.
 8. Transition issues – given our recommendations for changes to the benchmark calculations, it seems appropriate to develop a well-constructed approach to transition from one set of benchmarks to a different set. Recognizing other unique issues (grandfathered states, pre-standardized plans, etc.) will be an important part of this.

If you have any questions, please contact Joanna Ossinger at the Academy office (ossinger@actuary.org). The Academy will have some of the Work Group members in attendance in New York to respond to any questions you have. Alternatively a conference call would allow greater participation by members of the Work Group as well as the AHWG members.

Appendix A

Frank Dino, FL
4/30/03

– Medicare Supplement Refund/Credit Calculation Methodology –

Reden & Anders, Ltd. was engaged by CMS to examine the underlying assumptions in the Medicare Supplement refund and credit calculation formulas and consider alternatives.

This outlines issues addressed in the recent Reden and Anders report, dated December 6, 2002, and notes changes needed in statutes, rules and methodologies applicable to Medicare Supplement if the current regulatory approach is modified.

Issue	Pro	Con	Required Changes	
1.	Whether to allow carriers to offset accumulations in cash values in the formula	Theoretically correct	Very few if any Medicare Supplement contracts have cash values	Federal Statute: probably not NAIC Model: Yes
Proposed Recommendation: Do not modify methodology to account for this issue. As few if any contracts have cash values, there is negligible gain in amending method.				
2.	Vary the durational loss ratio curve which underlies the benchmark calculation by the rating methodology (issue age vs. other).	Enables better matching of actual experience to benchmarks, producing a more equitable refund trigger.	None known.	Federal Statute: Yes if play/type combination to be split for refund calc. Probably not if recombined before refund calculation. NAIC Model: Yes

Proposed Recommendation: Establish two rating methodology specific benchmark loss ratio curves, one for issue age rate schedules, and one for attained age/community rated schedules.

As a corollary, the report advocates entirely separate determination of refunds by rate methodology within a plan. This will reduce credibility and possibly forestall otherwise indicated refunds. It may be desirable to combine experience in the same manner for all rating purposes, in order to maintain plan internal rate relationships within a plan, (required by the model) benchmark calculations could be done for each rate structure within a plan, and the weighted average used in the refund calculation. It may not be desirable to do the rating process or refund calculations completely separately by rate structure.

3. Change the shape of the durational loss ratio curve.	Current curve is not representative of real products. Must reflect interest.		Federal Statute: No NAIC Model: Yes (worksheet attachments)
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Proposed Recommendation: Modify the benchmark loss ratio curve, not only to create rating methodology specific curves, (as in 2. above)but to more accurately reflect the shape of actual industry experience.

While there are several curves shown in the report, reflecting different trend, lapse, etc. assumptions, none reflect an issue year cohort of business. For the attained age/community rated curve, the curve selected should be designed for the most common type of structure. The report appears to envision only attained age structures which have distinct premiums for each age, while the most common attained age rate structures in the market are such that rates are level at ages 80 or 85 and above. If the goal is to have one curve for all attained age/community rated rate structures, we should consider one which is based on a rate structure for which rates are level at ages 80 and above. Suggested curves for both rating methodologies may be discussed in a future call.

4. Modify plan aggregation methodology. (Report proposes pool all plans (std+select) within rating methodology.	Aggregating forms improves credibility.	Proposal is aggregation within rating methodology for all rating purposes. Can create logical disconnects between rating methodologies within a plan.	Federal Statute: Yes NAIC Model: Yes
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Proposed Recommendation: Initiate some plan aggregation. Standard and Select are different “types” and are usually rated separately. It is desirable to combine experience in the same manner for all rating purposes. In order to maintain rate relationships between plans for both rating and refund purposes, benchmark loss ratios could be calculated pooling all plans within a rate methodology, and then weighting the pool benchmarks for the refund calculation. This should continue to be done separately for different “types”.

5.	Simplify benchmark LR calculation – treatment of first two years vs. three plus.	Simplify benchmark worksheet	None known	Federal Statute: No NAIC Model: only worksheets
Proposed Recommendation: This has already been accomplished in function. The NAIC benchmark form needs minor revisions to implement.				

6.	Policy Issue: 3 rd year LR requirement.	A curve which better fits a realistic product produces a more equitable refund trigger.	It is not a result of a well-priced rating structure.	Federal Statute: No NAIC Model: Yes
Proposed Recommendation: This is a corollary issue to changing the shape of the loss ratio curve. The concept of maintaining a requirement that business in duration X or later meet or exceed a 65% loss ratio should be retained. X would be defined consistently with benchmark curve(s). The report appears to provide for issue age business crossing 65% in their scenarios most frequently in the 5 th year.				

7.	Tolerance parameters in the refund calculation	Deal appropriately with situations with low levels of credibility		Federal Statute: No NAIC Model: only worksheets
Proposed Recommendation: Retain the same tolerance parameters. While pooling of plans within type will result in lower ‘total’ tolerances for all blocks, this is the natural result of the more credible data. A block which is performing overly well in total will pay a refund where it might not have had to on a plan by plan basis, but this is as it should be.				

Appendix B

Members of the Academy's Medicare Supplement Work Group:

Mike Abroe, Chair

David Bahn

John Bryson

Mike Carstens

Andrew Erman

Peter Hendee

David Shea

Bill Weller