

To: NAIC Life RBC Working Group
 From: AAA Life RBC Task Force
 Re: Health C-2 Factors, Recommendations relating to MCO-RBC Formula

Recommendations

<u>Product/Line</u>	<u>Recommended Approach</u>	<u>Current Approach</u>
Individual Major Medical	Combine with Group below, subject to surcharge of 20% for additional risk per Academy HORBC Working Group.	25% of premium to \$25 million and 15% of premium over \$25 million.
Group Major Medical	Follow MCO-RBC approach* when total Indiv and Group premium is more than \$100 million. Use MCO-RBC Factors without managed care credits for total Indiv and Group premium under \$100 million unless Small Premium Companies rule applies.	15% of premium to \$50 million and 7% of premium over \$50 million.
Stop-Loss Coverage	Keep current approach, no adjustment for loss ratio or managed care.	25% of premium
Medicare Supplement	Follow MCO-RBC approach** unless Small Premium Companies rule applies. Managed care credits used only if otherwise allowed.***	12% of premium
Small Premium Companies	Unless total health premium exceeds \$15 million, factors do not vary by product line. Use 25% of total health premium less 12.5% of premium for products currently subject to either the 12% or 8% factors.	Factors for some products vary for smaller amounts of premium, but for some products there is no variation by size.
Other Coverages	Keep current formula (except for Small Premium company adjustment) for 1998, but review changing factors for 1999 to be consistent across product lines using AAA HORBC work as the underlying basis.	

* For Individual and Group Major Medical (and similar products), 15% of premium to \$25 million plus 9% of premium in excess of \$25 million times

- a. an average loss ratio for the health-only organization, and
- b. one minus an average managed care credit factor

plus a percentage of administrative expenses (7% of first \$25 million and 4% of excess)

** For Medicare Supplement, 10.5% of premium to \$3 million plus 6.7% of excess times the same two adjustments (loss ratio and managed care credit).

*** Medicare Supplement would not normally have any managed care credit. However, when the managed care credit is used for Individual and Group Major Medical the calculation is done

based

on all premium so it has been included where appropriate.

The basis for these recommendations is the testing of two samples as outlined in the letter to the Academy Life RBC Task Force from Bill Weller, which is attached.

To: Cande Olson, Chair, AAA Life RBC Task Force

From: Bill Weller

Date: February 17, 1998

Re: Report on MCO-RBC Factor Testing in L&H RBC Formula

We were asked to review the potential effects of revising the health C-2 factors to be in line with those likely to be used in the MCO-RBC formula (H-2 factors). We were asked to propose appropriate modifications to the Life RBC formula to incorporate features of the MCO-RBC formula. In developing the recommendation, we attempted to balance the objectives of:

- appropriate reflection of underlying risk¹;
- level playing field for all health organizations; and
- simplicity of filing.

Some examples of balancing the above objectives are:

- simplicity of filing for many premium companies through the application of the Small Premium Company component;
- level playing field utilization of MCO business risk components when other parts of the MCO-RBC formula are used; and
- appropriate reflection of additional risk in Individual Major Medical line (20% surcharge to MCO-RBC factor).
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The testing was done on both the MCO-RBC formula and the Recommended Changes. Because of the number of companies with smaller amounts of business in various lines, the MCO-RBC minimum create significant distortions (note Mike Barth's comments from 1997). These are reduced in the Recommended Changes.

Areas Where MCO-RBC Formula Is Different Than Life Formula

The MCO-RBC formula uses a different approach to address the risks of Major Medical, Dental and Medicare Supplement products. Since it does not address other types of health insurance (e.g. Disability Income, Hospital Indemnity, AD&D etc.), we have assumed that the existing Life RBC for those types would not be changed.

For Major Medical, the key changes were:

- different factors are applied to claims⁴⁰
- (determined as premiums times a loss ratio);

¹ In general, the Academy's proposal of December, 1994 is assumed to be the best reflection of relative underlying risks.

- in addition to factors varying by level of premium dollars, a minimum dollar amount based on two times the maximum single claim is included;
- RBC can be lowered based on transfer of risk through managed care credits;
- Individual and Group business is combined; and
- an expense factor is added.

For Medicare Supplement, similar changes were made.

The comparison of factors is summarized in attachment 1.

Basis for Testing

There were two separate testing groups. The first was defined by the Life RBC Working Group to specifically look at the effects on that portion of carriers which would have the largest change in factors: (a) with Individual Major Medical premium in the \$10 million to \$75 million range (b) Individual Major Medical premium was 60% or more of total MM premium and (c) the health C-2 was at least 35% of total RBC. The second was intended to be a sample of all carriers with some health premium. This second group was split into 12 segments by six levels of major medical premium and between under and over \$500 million in assets.

There were 24 companies which met the criteria for the first test. The second group was defined as a 10% sample of each segment, but not less than 5 carriers (one segment had only 2 carriers). A total of 109 carriers were selected for the second test. Data from 1993 through 1996 filings was provided in sufficient detail to recalculate RBC after covariance and to produce a RBC ratio. The files for 1994 through 1996 were used to review the potential for trend-based 'events' (RBC ratio between 250% and 200%) as well as RBC ratios under 200%.

In completing the testing, certain assumptions had to be made where detail was not available. The areas where assumptions were required are described in attachment 2. Testing of changes to these assumptions (also described in attachment 2) did not show any significant change in RBC ratios or the potential for a change in the likelihood of an 'event' having occurred.

Test Results - First Test of 24 Companies

As expected, there was a significant reduction in RBC for these groups. Since the test was based on 1996 experience, it is relevant to look at the effect over time of the percentage changes in total RBC after covariance.

<u>Year</u>	<u>Change in Total RBC After Covariance</u>				
	<u>Increase</u>	<u>No Chg</u>	<u>Decrease < 25%</u>	<u>Decrease 25-45%</u>	<u>Decrease >45%</u>
1994	6	2	1	12	3
1995	2	4	3	12	3
1996	2	3	2	11	6

There would have been a reduction in the number of carriers with 'events reported' if the Recommended Changes had been applied. One of these would show stable results around 260% based on the formula with the Recommended Changes while the L&H RBC formula shows a trend-based event in 1995 and Company Action Level event in 1996. A second shows a trend-based event in 1996 only under the L&H formula. The final difference is a small company which shows no events under the L&H formula while the RBC ratio after applying the Recommended Changes would be at the Company or Regulatory Action Level in all three years. Three others would have had the same event reporting requirements.

Test Results - Second Test of 109 Carriers

The sample groups with under \$10 million in Medical premium showed results that increased RBC for those carriers - the fixed dollar amount portion of the MCO-RBC formula produced some extremely large increases (the average increase in health C-2 was 8000%). Above \$10 million, the 1996 RBC decreases by 13 to 23% and the RBC ratio also decreases (up to 20% for carriers with under \$500 million in assets but generally there was little change for carriers with over \$500 million in assets).

The Recommended Changes seek to adopt a size-based approach in a simplified format by combining all lines of health business whenever total health premium is under \$15 million (defined as Small Premium Companies). The concept of size-based factors is included in the L&H formula for some health product lines but not all. It was incorporated into all product lines in the AAA proposals and the MCO-RBC formula. See attachment 3.

Testing was done on the impact over the three years 1994-1996 of the Recommended Changes. The segments were defined based on 1996 data. RBC ratios were used to determine the potential for 'event reporting.' For larger carriers there was no difference in the number of 'events' for either 1995 or 1996 and health insurance did not seem to be the basis for any of the events. For carriers with less than \$500 million in assets, the results from the samples are:

<u>Major Medical Premium</u>	<u>#</u>	<u>Number of Potential Reporting Events in Sample</u>			
		<u>Life/A&H RBC Formula</u>		<u>MCO-RBC Formula</u>	
		<u>1995</u>	<u>1996</u>	<u>1995</u>	<u>1996</u>
\$0	38	0	0	0	0
under \$5 million	15	0	0	0	0
\$5 to \$10 million	5	0	1	0	1
\$10 to \$100 million	9	0	2	0	1
\$100 to \$500 million	5	0	1	0	1
over \$500 million	2 ²	0	2	0	1

Thus, two carriers subject to event reporting under the Life formula for 1996 would not have had an event under the formula with the Recommended Changes.

² Both companies went from essentially no major medical premium in 1995 to over \$500 million for 1996. It is unclear whether or not this was new business or the purchase of existing business.

Recommendations

It appears that modifying factors is appropriate given the desire to maintain consistency for similar risks. The MCO-RBC factors could be used for larger premium levels, over \$10 million without any adjustment for managed care credits and with adjustment for managed care credits if premium exceeds \$100 million.

When total health premium is under \$15 million, it may be best to replace the current product based set of factors with a single basis: 25% of total health premium less 12.5% of premium for supplemental coverages (currently subject to either a flat 12% or a flat 8%). The result would be a slight increase in RBC ratios for those without major medical and those with only group major medical. There is the potential for a decrease for a company with only Non-Cancelable Disability Income (current formula is 35%). The effect of the changes as a percent change in Total RBC (after covariance) is shown in the following table.

<u>Major Medical Premium</u>	<u>Ratio of Total RBC After Covariance</u> (Life RBC with Recommended Changes)	
	<u>Assets < \$500mil</u>	<u>Assets > \$500 mil</u>
\$0	102.8%	100.0%
under \$5 million	111.0	100.0
\$5 to \$10 million	127.1	100.0
\$10 to \$100 million	95.0	99.4
\$100 to \$500 million	86.6	89.8
over \$500 million	97.6	96.9

We also reviewed the number of times in which the Health C-2 RBC value increased by more than \$250,000 and 10% of Total RBC. In 1995 there were three such companies and two of them would have similar change in 1996.

Attachment 1

Comparison of C-2 Factors from the Life RBC and MCO-RBC Formulas

Life RBC Formula Description

MCO-RBC Formula Description

Major Medical (Includes hospital/ surgical/ medical coverages but excludes Stop-Loss)

Individual coverage factors are a percentage of premium:

first \$25 million 25%
over \$25 million 15%

Group coverage factors are a percentage of premium:

first \$50 million 15%
over \$50 million 7%

An adjustment is allowed to the Group C-2 equal to 50% of reserve held for experience-rated contracts.

Combined Individual and Group coverage factors are a percentage of premium times an average loss ratio:

first \$25 million 15%
over \$25 million 9% with 2 adjustments:

(a) there is a minimum dollar value equal to 2 times the maximum retained risk on one claim, but the dollar value is capped at \$1.5 million
(b) the total H-2 value is reduced by an average managed care credit factor.

Group Stop-Loss was combined with major medical.

Medicare Supplement

While there are separate lines, the Individual and Group factors are the same and there is no variation by premium level:

all premium 12%

Similar approach to that above, except that the premium ranges, factors and the cap on the dollar maximum are lower:

first \$3 million 10.5%
over \$3 million 6.7%

2 time maximum retained risk is capped at \$50,000.

Expense Portion of Business Risk (C-4 or H-4)

No factor applied to any exposure

A composite factor based on premium level is applied to actual administrative expenses (excluding commissions):

first \$25 million 7%
over \$25 million 4%

Attachment 2
Assumptions Used in Making the Comparison

Loss Ratio

Since the MCO-RBC formula applies the factor to claims, the testing needed to reflect the difference between premiums and claims. It was felt that this difference would vary by product line (Individual vs Group Major Medical and a separate assumption for Medicare Supplement).

Standard Assumptions: For Individual Major Medical, we assumed 70%; for Group Major Medical, we assumed 85%; and for Medicare Supplement, we assumed 75%.

Variability Testing: We tested an increase of 5% in all loss ratios, a reduction of 5% in only the Group MM portion. We also tested increasing the Individual MM only by 20% (based on the AAA HORBC Working Group's recommendation for a factor relating to a requirement for prior approval of rate increases) and have included this adjustment in the Recommended Changes.

Managed Care Credit - Offset to H-2 Value

The MCO-RBC formula requires the development of a composite MCC factor. The H-2 value is reduced by multiplying the result after summing the standard factors times appropriate exposures by 1 minus the MCC factor. For purposes of testing, we assumed that the source of any MCC factor adjustment for companies filing the Life & Health formula would be large Group Major Medical business.

Standard Assumptions: We applied a larger than average factor (15%) only when Group Major Medical premium exceeded \$50 million.

Variability Testing: We also tested with a MCC factor applied only to large group of 10% as well as no MCC factor.

Expense to Premium Ratios

The MCO-RBC formula applies a factor to actual administrative expenses. We assumed that these could be approximated as a percentage which varied by product line. Since the factor is not applied to commissions, we assumed that the variability by line of business would be small to nonexistent.

Standard Assumptions: We assumed 10% of premium was the non-commission expense level for all product lines.

Variability Testing: We also tested a 15% of premium ratio and a variation where the expense ratio was 15% on major medical but 10% on Medicare Supplement.