AMERICAN ACADEMY of ACTUARIES

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HEALTH ORGANIZATION RISK BASED CAPITAL TASK FORCE
Chair: Al Ford

REPORT TO
NAIC HORBC WORKING GROUP
December, 2000

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The Academy's HORBC Task Force has been working on several RBC issues.

A DI/LTC/STOP LOSS Working Group on the Academy's HORBC Task Force has been conducting extensive modeling work to develop possible revised C-2 /H-2 treatment of disability income, long term care and stop loss coverages. An oral report is expected at the December meeting of the NAIC HORBC Working Group.

A recommendation from the Academy's Joint RBC Task Force for structural changes to the Life RBC and MCO RBC formulas to facilitate expected changes for tax effects is included with this report. For the MCO RBC formula, detailed instructions are given.

A recommendation from the DI RBC Work Group of the Academy's HORBC Task Force is also included with this report providing specific changes to the MCO RBC formula to implement structural enhancements to allow for expected changes in the treatment of disability income to be recommended next year.

A work group has been examining the impact of codification on HORBC formulas and factors with respect to asset items, including:

1. Effect of deferred tax assets and liabilities and other adjustments for tax effects.

2. Healthcare delivery assets.

3. Common stocks, covariance and factor.

4. Healthcare receivables

Commentary is in the process of development, and a final report is expected to be available for the March meeting. An oral report is expected at the December meeting of the NAIC HORBC Working Group.

In addition to this, substantial progress has been made by the DI/LTC/STOP LOSS Working Group in developing new C-2/H-2 treatments for these coverages. An outline for a final report has been designed and recommendations are expected for the March NAIC meeting. Short reports from two of the Working Groups are included with this report. The DI Work Group should be commended for creating the model used for both DI and LTC, preparing the recommended structural changes to the MCO RBC formula to accommodate their expected forthcoming recommendations and designing the format and outline for the final report.

RBC Disability Formula Update
Proposed Formula Structure
November, 2000

The research to provide updated factors for the Disability components of the various RBC formulas is pointing towards a need to update the current structure for measuring risk. The current structure does not adequately differentiate between the various types of disability coverage that exist. To reflect these variations, our committee believes that additional segments should be included in the formula. In addition, a first layer for RBC that is normally attached to small amounts of premium, i.e. the first $50 million of premium, does not easily allow for a combination of similar types of coverage. The HORBC Disability sub-committee recommends that the structure of the disability components of the Life and MCO formulas be updated to remove these shortcomings. These proposed changes impact the current calculation of pages LR015 of the Life formula and MR012 of the MCO formula.

Disability Premium Component, LR015, MR012

1. Individual Premium Component - Vary the formula for 4 types of coverage and include and additional amount of RBC for the first $XX million of total Individual Disability Premium. The source of the premium figures is as follows:

Disability Income Segment	Annual Statement (Earned Premium)
Individual Non-Cancellable	Sch. H, Part 1, Line 2, Column 5, in part
Individual Guaranteed Renewable	Sch. H, Part 1, Line 2, Column 6, in part
Individual Accident Only	Sch. H, Part 1, Line 2, Column 8, in part
Individual Other	Sch. H, Part 1, Line 2, Columns 7 and 9, in part

For each of the above segments, the HORBC Disability Sub-Committee will provide two risk factors expressed a percentage of premiums. One set of factors (Factor-1 to Factor-4) will apply to the first $XX million of total Individual Disability Premium. The second set of factors (Factor-5 to Factor-8) will apply to the total premium for each segment.

To apply Factor-1 through Factor-4, fill the first $XX million of Individual Premium sequentially as follows: first with Non-cancellable, second with Guaranteed Renewable, third with Accident Only, and fourth with Other Individual. Total premium for this component will not exceed $XX million.

RBC for First $XX Million of Individual Premium:

Non-Cancellable Premium	x	Factor-1	=	RBC Requirement
Guaranteed Renewable Premium	x	Factor-2	=	RBC Requirement
Accident Only Premium	x	Factor-3	=	RBC Requirement
Other Individual Premium	x	Factor-4	=	RBC Requirement

The second set of factors will apply to the total premium for each segment.

RBC for Segment by Segment Premiums:

Non-Cancellable Premium	x	Factor-5	=	RBC Requirement

Guaranteed Renewable Premium	x	Factor-6	=	RBC Requirement
Accident Only Premium	x	Factor-7	=	RBC Requirement
Other Individual Premium	x	Factor-8	=	RBC Requirement

2. Group and Credit Disability Component - Vary the formula for 4 types of coverage. For each type of coverage, allow for two tiers of premiums similar to the structure for the Individual business with one tier applied to the first $YY million of Total Group Disability Premium. Also, add a factor to be applied to Credit active life reserves. The premium and reserve sources are as follows:

Disability Income Premium, Reserves	Annual Statement Source
Group Disability:	
Long Term Disability	Sch. H, Part 1, Line 2, Column 2, in part
Short Term Disability	Sch. H, Part 1, Line 2, Column 2, in part
Credit Disability:	
Periodic Premium Plans *	Sch. H, Part 1, Line 2, Column 3, in part
Single Premium Plans **	Sch. H, Part 1, Line 2, Column 3, in part
Additional Reserves	Exhibit 9, Line 9, Column 3, in part

* Credit Disability premiums that do not require Additional Reserves.
** Credit Disability premiums that require Additional Reserves.

For each of the 4 premium segments, the HORBC Disability Sub-Committee will provide two risk factors expressed as a percentage of premiums. These eight premium factors will be applied in the same fashion as in the Individual segment. The order of filling the first level of premium will be first Long Term Disability, second Short Term Disability, third Periodic Premium Credit, and fourth Single Premium Credit. The factor for Additional Reserves for credit disability will be applied independent of any of the premium factors.

Note: To qualify as a short term disability coverage, a group plan must have a benefit period less than or equal to 2 years.

Note: These modifications impact the structure of the premium component of the C-2 and H-3 elements of the RBC formulas. The sub-committee does not anticipate any changes in the structure related to risk measurements for the claim reserves component.

LTC WORK GROUP—Chair, Bob Yee

The LTC Work Group has produced initial modeling results for a set of input assumptions that are considered to be expected values. The group is in the process of identifying specific assumptions that will have significant impact on the outcomes. These assumptions will be examined more closely. A range of values for these assumptions will be determined with appropriate justification and documentation. These ranges will be the basis for scenario testing.

The group intends to coordinate with the DI Work Group to ensure that assumptions among the two product lines are as consistent as possible.

The modeling is expected to be completed by the middle of January and recommendations are targeted to be presented at the March 2001 NAIC meeting.

Progress Report of American Academy of Actuaries Stop Loss Risk Based Capital Subgroup

Tim Patria, chair
David Hanson
Jim Mange
Darrell Knapp
Leigh Wachenheim

The group has begun the modeling process and has decided upon the distribution functions and sensitivity analysis for the individual stop loss business. All of the needed model inputs have been collected and we are ready to run the model for the first pass at results. The same kind of information will be put together for the aggregate stop loss analysis. As the individual stop loss market is the vast bulk of the market, it is likely that these results will largely drive the RBC result if we continue to proceed down the path of determining a single RBC factor for the stop loss business.

The industry experience information received to date will be added to the information collected by our predecessor group and used in combination with the model results above to hone in on an appropriate factor.

November 2000