AMERICAN ACADEMY *of* ACTUARIES

Proposal on Workers Compensation Carve-Out

Presented by the American Academy of Actuaries' Life Capital Adequacy Subcommittee to the National Association of Insurance Commissioners' Life Risk-Based Capital Working Group

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The following report was prepared by a subgroup (chaired by Jeff Brown) of the Life Capital Adequacy Subcommittee. The subgroup is made up of various members of the subcommittee as well as Ralph Blanchard, Brian Brown, Mike Hawksworth, and Bill Weller.

Workers Compensation Carve-Out

Scope

The following proposal applies to Workers Compensation Carve-Out business. The NAIC defines this business as "reinsurance (including retrocessional reinsurance) assumed by life and health insurers of medical, wage loss and death benefits of the occupational illness and accident exposures, but not the employers liability exposures, of business originally written as workers compensation insurance".

Outline for Proposal

In choosing a framework for addressing Workers Compensation Carve Out in the life Risk-Based Capital (RBC) formula, we examined several alternatives. In our view, the property & casualty (P&C) RBC formula provides the most appropriate structure, and we therefore rely on it as a foundation for the treatment of such business in the life RBC formula. Furthermore, we have chosen to rely on certain factors in the P&C RBC formula as an appropriate measure for RBC to be held for the risks of this line of business. We have not undertaken any quantitative analysis to either evaluate the P&C factors or to independently verify or replicate them. Therefore, our goal was to make the life RBC formula reasonably consistent with the P&C RBC formula with respect to this line of business.

The P&C RBC formula applies factors to both reserves and premium to assign required capital to business very similar to Workers Compensation Carve-Out. We have reviewed the application of these factors in the P&C formula and recommend corresponding adjustments for implementation in the life formula. In this process, we have aimed to balance reasonable conservatism with simplicity in drawing up a proposal that can be expediently implemented. Therefore, the multi-step process in the P&C formula is combined into one factor for each of the reserves and premiums in this proposal (with reinsurance recoverables being handled with a single separate factor). We recommend that all of the proposed adjustments are to be reflected in C-2 of the life formula.

Note, that using the P&C base, the factors are assumed to be post-tax for implementation in the life formula with no corresponding pre-tax values. If the P&C formula were to be modified to reflect taxes, we would recommend that the factors proposed herein be revised to match the tax-adjusted factors.

Furthermore, if any other changes were to occur in the P&C factors referenced herein, we would recommend that the life factors be reviewed and updated as well.

One dismissed alternative approach worthy of note is the health risk titled "Stop Loss". With the RBC treatment of Stop Loss relying on premium, we determined that such a framework was not appropriate for Workers Compensation Carve-Out where much of the risk is associated with reserves.

Net Factors

Industry Experience. The P&C formula starts with industry average risk factors that are provided by the NAIC for each major line of business. It is our determination that Workers Compensation Carve-Out business falls under the line of business "Reinsurance B" based on the risk profile of such non-proportional or excess-of-loss business. The industry average factors in the current P&C RBC formula are those that were implemented in 1994. While this P&C line covers more than just Workers Compensation reinsurance, there was no basis for further adjustment to the P&C factors.

Company Experience. In general, the P&C formula adjusts the industry average risk factor for up to 50 percent of the relativity between recent company and industry experience. This 50 percent weighting is meant to introduce a measure of credibility to recent company experience versus industry experience relativities. However, the formula disallows any recognition of company experience/industry experience differences when certain criteria (e.g., minimum number of years with non-zero losses and reasonably stable premium volume) have not been met.

We have chosen not to introduce company experience into the life formula on account of (1) the high likelihood of a life company writing this business failing to meet the criteria necessary to qualify for company experience weighting, (2) reliability of historical life company data with respect this business, (3) the assumption that this business is being written exclusively on retrocession basis such that results may not be stable from year to year due to contract turnover in the life company's reinsurance portfolio with credibility being more appropriately attributable at the primary or reinsurer level, and (4) ease of implementation. Alternatives that would allow for distinctions by layer of reinsurance or degrees of retrocession would also introduce a level of complexity that does not appear to be warranted given the relative contribution of this business to overall RBC. Incorporation of company experience could be reserved for future implementation as this RBC charge is reviewed and as life companies disclose more experience data for this business.

Reserve Discounting. With the requirements associated with the Workers Compensation Carve-Out Supplement as of 2003, both discounted and undiscounted reserve figures will be available in a life company's annual statement just as they are in a P&C company's Schedule P. The P&C formula applies its factors to reserves that are undiscounted except for tabular discount and then applies an explicit factor for discounting that varies by line of business. Following this approach, the proposed factors for the life formula will already have a discount built into them and should therefore be applied to reserves that are undiscounted except for tabular discount.

Expense Ratio. When applying factors to premium, the P&C formula adjusts for the company's overall expense ratio. The expense ratio is a concept that is central to P&C business; however, a direct analogy is not readily available for life business. Following the approach described above that relies on industry rather than company experience, we have chosen a P&C industry average for the expense ratio. Specifically, we have consulted Best's Aggregates & Averages (data through 2001) for the five-year average expense ratio for reinsurers. Given that this annual expense ratio has remained in a tight band in recent years, we do not foresee having this input updated annually, but would instead recommend examination as this RBC charge in its entirety is reviewed in the future. Appendix 2 contains historical Best expense ratios.

Discount for Loss Sensitive Business. The P&C formula allows an additional discount on certain types of low-layer business based on data provided in Schedule P Part 7. We have made no allowance for such a discount given (1) the Workers Compensation Carve-Out Supplement does not give life companies the option to complete Schedule P Part 7, which is a prerequisite for taking this discount and (2) our evaluation of this type of business as high-layer.

Loss Concentration Factor. In the P&C formula, this adjustment allows credit for diversification among the various major lines of business through the application of the Loss Concentration Factor (LCF), which can range from 0.7 to 1.0. While this adjustment applies in the context of a diversified portfolio of P&C insurance risks, we have chosen to ignore this discount based upon (1) the assumed absence of multiple P&C insurance risks in a life company and (2) diversification benefits already afforded to a life company via the covariance adjustment of C-2—where this RBC charge is being applied—against C-1 and C-3—from which the large majority of a life company's RBC is derived.

Correlation of Risks with respect to Premium and Reserve Factors. In the P&C formula, required capital for WC reinsurance is calculated by bringing together the factors on premium and reserves through R-5 and R-4, respectively, such that each is adjusted for covariance. This treatment is based on the assumption of independence between pure pricing/underwriting/event risk (captured by the factor on premium), "final cost"/development risk (captured by the factor on reserves), and other risks. The life formula makes no analogous distinction, combines all underwriting risk in C-2, but still adjusts for covariance with other risks. The most straightforward way to mirror the P&C treatment would be to further discount the factors on premium and reserves before they are summed together. We have chosen not to make a further adjustment based upon (1) our view that in practice such an adjustment would be small due to the factor on reserves tending to dominate the factor on premiums given the timeframe of this type of business, (2) diversification benefits already afforded to a life company via the covariance adjustment of C-2 against C-1 and C-3, as discussed above, and (3) a preference for simplicity.

Reinsurance Recoverable

In both the life and P&C formulas, an RBC charge is levied against reinsurance recoverables, recognizing credit risk on these amounts; however, the formulas differ as to the amount of the charge and the placement in the formula. The P&C charge of 10 percent is applied half in R-3 (credit risk) with the other half coming through in R-4 (underwriting risk - reserves). The covariance aspect of the RBC formula reduces the net RBC charge differently for each company. The life charge of 0.5 percent is applied entirely in C-1.

The higher P&C charge relative to the life charge can be rationalized given empirical evidence of relatively more disputes on P&C than life reinsurance contracts. We propose reflecting this distinction on Workers Compensation reinsurance recoverables by implementing a new charge in C-2 in addition to the current 0.5 percent charge in C-1. This seems appropriate given (1) assumed independence between reinsurance disputes and credit risk on other fixed income assets, (2) similar treatment in the P&C formula where this charge is partially taken in underwriting risk, and (3) ease of implementation.

We recommend a C-2 value for reinsurance recoverables of 9.5 percent, mirroring the distribution of a sum total 10 percent factor amongst the variance RBC components as is done in the P&C formula. Furthermore, at a 9.5 percent C-2 charge, preliminary analysis of total life data (which may not necessarily generate an appropriate representative result) yields a net RBC charge after covariance reasonably similar as we would expect in the P&C formula (roughly 4 percent).

As is the case in the P&C formula, cessions to State Mandated Involuntary Pools and Associations or to Federal Insurance Programs, qualifying[1] Voluntary Market Mechanism Pools and Associations, and U.S. Parents, Subsidiaries, and Affiliates will be exempt from this new charge.

Approach to Mechanical Implementation

As described above, the step-by-step process taken in forms PR014 and PR015 of the P&C formula, is to be summarized in the life formula into two factors that are applied to the appropriate reserves and premium in the Workers Compensation Carve-Out Supplement. In addition, a third factor is applied to reinsurance recoverables on this type of business. All three factors can be handled by adding three lines in LR018 Underwriting Risk – Other. Using this page has the additional advantage that no adjustments are needed to LR026 Calculation of Tax Effects.

[1] We understand that it is the intent of the P&C RBC formula to apply a 0 percent charge to reinsurance recoverables from voluntary pools only that meet certain criteria. Such criteria include joint liability for pool members along with adequate spread of risk, such that the risk of the pool collapsing from one or a few individual member solvency problems is immaterial. However, this language does not appear in the P&C RBC instructions. We have nevertheless included this item in our proposal.

Furthermore, except for reinsurance recoverables, we recommend backing-out the applicable reserves and premiums from existing line items as they currently come through the RBC formula and adding new lines to implement the new charges (as opposed to an add-on approach). This is meant to avoid confusion around reserve discounting and differences between written and earned premium. As discussed above, the proposal for reinsurance recoverables essentially takes an add-on approach.

See the Appendix 1 for further detail.

Appendix 1: RBC Formula Factors and References

WC Carve-Out Reserve Factor:

= [(Industry Reserve Factor) + 1] * (Investment Income Discount) – 1

= [(PR014 Col17 Row4) + 1] * (PR014 Col17 Row8) – 1

= [.838 + 1] * .733 – 1

= .347

WC Carve-Out Premium Factor:

= [(Industry Premium Factor) * (Investment Income Discount)] + Expense Ratio – 1

= [(PR015 Col17 Row4) * (PR015 Col17 Row8)] + Best's A&A for reinsurers – 1

= [1.379 * .762] + .313 – 1

= .364

WC Carve-Out Reinsurance Recoverables Factor:

.095

WC Carve-Out Reserve Definition:

Workers Compensation Carve-Out Supplement, Schedule P, Part 1, Column 24, Line 12

WC Carve-Out Premium Definition:

Workers Compensation Carve-Out Supplement, Underwriting and Investment Exhibit, Part 2 Premiums Written, Column 5 Net Premiums Written

WC Carve-Out Reinsurance Recoverables Definition:

Workers Compensation Carve-Out Supplement, Schedule F, Part 2 Ceded Reinsurance, Column 15 Total Recoverable, sum of Lines:

Total Authorized – Affiliates – Other (Non-U.S.)	0399999
Total Authorized – Other U.S. Unaffiliated Insurers	0599999
Total Authorized – Pools – Voluntary Pools	0799999
Total Authorized – Other Non-U.S. Insurers	0899999
Total Unauthorized – Affiliates – Other (Non-U.S.)	1299999
Total Unauthorized – Affiliates – Other U.S. Unaffiliated Insurers	1499999
Total Unauthorized – Pools – Voluntary Pools	1699999
Total Unauthorized – Other Non-U.S. Insurers	1799999

Reduction in Premium in C-2:

LR016 should contain an additional line immediately above Line 26 for:

Workers Compensation Carve-Out

As is done for other lines above it, the new line should reference "Earned Premium (Schedule H Part 1 Line 2 in part)". This line should have a factor of zero associated with it.

Additional RBC in C-2

LR018 should contain the following additional lines:

Workers Compensation Carve-Out Risk
(4) Net Premiums Written (source) (amount) .364 (RBC Value)
(5) Claim Liability and Reserve (source) (amount) .347 (RBC Value)
(6) Reinsurance Recoverable Balances to Non-Affiliated Companies (source) (amount)
(6.1) Reinsurance Recoverable for Qualifying Voluntary Pools (Company Records) (amount)
(6.2) All Other Reinsurance Recoverable Balances (Line (6) – Line (6.1)) (amount) .095 (RBC Value)

Current line (4) on LR018 should be changed to line (7) and be the sum of lines (1) through (6).

Reduction in Reserves in C-2:

LR020 should be expanded to allow for a new column that deducts reserves associated with this line of business. The new column should reference:

Workers Compensation Carve-Out Supplement, Schedule P, Part 1, Columns 35 and 36, in part

Technical Note: In the P&C blank, figures in Schedule P and Schedule F are in 000s. If this is the case for the Workers Compensation Carve-Out Supplement, then all amounts referenced from there need to be multiplied by 1000.

Appendix 2: Expense Ratio

Source: Best's Aggregates & Averages – Property/Casualty

Professional Reinsurers –71 Companies (p139)

Year	Underwriting Expenses (%)
1997	31.8
1998	33.5
1999	31.1
2000	30.7
2001	30.1
5-Year Average	**31.3**

HEALTH PREMIUMS and HEALTH CLAIM RESERVES

LR016 and LR020

Basis of Factors

Risk-based capital factors for Health insurance are applied to medical and disability income, long-term care insurance and other types of health insurance premiums and Exhibit 9 claim reserves with an offset for premium stabilization reserves. For health coverage which does not fit into one of the defined categories for risk-based capital, the "Other Health" category is to be used.

Medical Insurance Premium

The business is subdivided by product into three categories for individual coverages and four categories for group and credit coverages depending on the risk related to volatility of claims. The factors were developed from a model that determines the minimum amount of surplus needed to protect the company against a worst case scenario for each type of coverage. The results of the model were then translated into either a uniform percentage or a two-tier formula to be applied to premium. The two-tier formula reflects the decreased risk of a larger in force block. The formula includes several changes starting in 1998 for some types of health insurance. These changes add several additional worksheets and are designed to keep the RBC amounts for health coverage consistent regardless of the RBC formula used. If the company has Comprehensive Medical business, Medicare Supplement or Dental business, it will be directed to these additional worksheets. The instructions for including paid health claims in the various categories of the Managed Care Discount Factor Calculation can be found in the instructions to LR019 Underwriting Risk – Managed Care Credit. Appendix 2 of these instructions lists commonly used health insurance terms. If the company has any of the three mentioned types of Medical Insurance, it will also be required to complete additional parts of the formula for C-3 Health Credit Risk and C-4 Health Administrative Expenses Risk portion of the Business Risk.

Disability Income and Long-Term Care Insurance (LTC) Premium

Prior to 2001, the individual disability income factors were based on models of the disability risk completed by several companies with significant experience in this line. The group long-term disability income risk was modeled based on methodology similar to that used by one of the largest writers of this business. The pricing risk was addressed principally as the delayed reaction to increases in incidence of new claims and to the lengthening of claims from slower recoveries than assumed. For long-term care, the experience needed to develop unique factors is still under development. Starting in 1999, and until new factors are developed for LTC, new lines specific to long-term care premiums have been added and use the original disability income factors.

Starting in 2001, new categories and new factors are applicable to all types of disability income premiums. These factors are based on new data and apply a model similar to that used for other health premium risk to that data.

Claim Reserves

Additional risk-based capital of 5 percent of claim reserves for both individual and group and credit is required to recognize the risk of the level of recoveries and other claim terminations falling below that assumed in the development of claim reserves. However, claims reserves for Workers Compensation Carve-out are excluded from this charge and are separately assessed risk-based capital on page LR018 Underwriting Risk – Other, Line (5); reserves entered for this exclusion should be reported in net balance sheet reserves in Schedule P, Part 1 of the Workers Compensation Carve-Out Supplement.

Pre-Tax and Post-Tax Factors

The formula uses pre-tax factors for all types of health insurance. Because many insurers of some types of health insurance write very little other business, it was determined that there would be no difference between pre-tax and post-tax factors except where substantial investment income is assumed as part of the product pricing. Thus, for disability income and long-term care insurance, the pre-tax factors on pages 26-28 will be adjusted to post-tax by applying a tax-effect change to RBC in LR026. For reasons of practicality and simplicity, credit disability is included with other disability income and adjusted to post-tax. The pre-tax RBC values for other types of health insurance will not be adjusted (the factor on line (124) of LR026 is 0.0000).

Specific Instructions for Application of the Formula

The total of all earned premium categories LR016 Health Premiums, Line (~~23~~28), Column (1) should equal the total in Schedule H, Line 2, Column 1 of the Annual Statement. Earned premium for each of these coverages should be from underlying company records. Earned premium may be reported in Schedule H for Administrative Services Contracts (ASC) and/or the Federal Employees Health Benefit Plan (FEHBP) and/or Worders Compensation Carve-Out which are included in order that Line (~~23~~28) will equal the total in Schedule H. As such, there is no RBC factor applied to any premium reported on lines (14), ~~or~~ (~~21~~25), or (26). For some of the coverages, two tier formulas apply. The calculations for these coverages shown below will not appear on the RBC filing software but will automatically be calculated by the software.

Line (1)
Health premiums for usual and customary major medical and hospital (including comprehensive major medical and expense reimbursement hospital/medical coverage) written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page LR017 Underwriting Risk – Experience Fluctuation Risk Column (1) Line (1.1).

Line (2)
Health premiums for Medicare supplement written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page LR017 Underwriting Risk – Experience Fluctuation Risk Column (3) Line (1.1).

Line (3)
Health premiums for dental or vision coverage written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page LR017 Underwriting Risk – Experience Fluctuation Risk Column (4) Line (1.1).

Line (4) and Line (11)
There is a factor for certain types of Limited Benefit coverage (Hospital Indemnity, which includes a per diem for intensive care facility stays, and Specified Disease) which includes both a percent of earned premium on such insurance (3.5 percent) and a flat dollar amount ($50,000) to reflect the higher variability of small amounts of business.

Line (5) and Line (12)
The factor for Accidental Death and Dismemberment (AD&D) insurance (where a single lump sum is paid) depends on several items:

1. Three times the maximum amount of retained risk for any single claim;
2. $300,000 if 3 times the maximum amount of retained risk is larger than $300,000;
3. 5.5 percent of earned premium to the extent the premium for AD&D is less than or equal to $10,000,000; and
4. 1.5 percent of earned premium in excess of $10,000,000.

There are places for reporting the total amount of earned premium and the maximum retained risk on any single claim. The actual RBC Requirement will be calculated automatically as the sum of (a) the lesser of items 1 and 2 plus (b) items 3 plus 4.

Line (6) and Line (13)
The factor for Other Accident coverage provides for any accident-based contingency other than those contained in Lines (5) or (12). For example, this line should contain all the premium for policies that provide coverage for accident-only disability or accident-only hospital indemnity. The premium for policies that contain AD&D in addition to other accident-only benefits should also be shown on this line.

Line (7)
Health premiums for usual and customary major medical and hospital (including comprehensive major medical and expense reimbursement hospital/medical coverage) written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page LR017 Underwriting Risk – Experience Fluctuation Risk Column (1) Line (1.2).

Line (8)
Health premiums for dental or vision coverage written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page LR017 Underwriting Risk – Experience Fluctuation Risk Column (4) Line (1.2).

Line (10)
Health premiums for Medicare supplement written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page LR017 Underwriting Risk – Experience Fluctuation Risk Column (3) Line (1.2).

Lines (15) through (24)
Disability income premiums are to be separately entered depending upon category (Individual and Group). For Individual, a further split is between noncancellable (NC) or other (GR, etc.). For Group, the further splits are between Credit Monthly Balance, Credit Single Premium (with additional reserves), Credit Single Premium (without additional reserves), Group Long-Term (benefit periods of two years or longer) and Group Short-Term (benefit periods less than two years). For long-term care insurance, premiums are reported separately for Individual noncancellable, Individual (other than NC) and Group LTCI. The RBC factors vary by the amount of premium reported such that a higher factor is applied to amounts below $50,000,000 for similar types. Starting in 2001, in determining the premiums subject to the higher factors, individual disability income noncancellable and other is combined. All types of Group and Credit are combined in a different catergory from Individual. For long-term care, all types (Individual and Group) are combined. Starting in 2001, the formula will calculate the pre-tax RBC as follows:

		Annual Statement Source	(1) Statement Value	Factor	(2) RBC Requirement
	Disability Income Premium				
Line (15)	Noncancellable Disability Income - Individual Morbidity	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million		X 0.539 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) over 50 Million		X 0.231 =	
		Total (Amounts reported on Health Premiums, Line (15))			
Line (16)	Other Disability Income - Individual Morbidity	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million less the premium in line (15) up to 50 million		X 0.385 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) over 50 Million not included above subject to the 0.385 factor		X 0.108 =	
		Total (Amounts reported on Health Premiums, Line (16))			

Line (17)	Disability Income - Credit Monthly Balance	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million		X 0.308 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) over 50 Million		X 0.046 =	
		Total (Amounts reported on Health Premiums, Line (17))			
Line (18)	Disability Income – Group Long Term	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million less premium in line (17) up to 50 million		X 0.231 =	
		Earned Premium(Schedule H, Part 1, Line 2, in part) not included above subject to the 0.231 factor		X 0.046 =	
		Total (Amounts reported on Health Premiums, Line (18))			
Line (19)	Disability Income - Credit Single Premium with Additional Reserves	(a) Earned Premium (Schedule H, Part 1, Line 2, in part) Amount to be reported on Health Premiums, Line (19)			
		(b) Additional Reserves (LR016 Health Premiums Column (1) Line (28))			
		(c) Prior Year Additional Reserves (LR016 Health Premiums Column (1) Line (29))			
		(d) Adjusted Premiums equals ((a) -(b) + (c))			
		Adjusted Premium (Line (d) above) first 50 Million less the premium in lines (17) + (18) up to 50 million		X 0.231 =	
		Adjusted Premium (Line (d) above) not included above subject to 0.231 factor		X 0.046 =	
		Total (Amounts reported for RBC, Line (19))			
Line (20)	Disability Income – Credit Single Premium without Additional Reserves	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million less the premium in lines (17) + (18) + (19) up to 50 million		X 0.154 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) not included above subject to 0.154 factor		X 0.046 =	
		Total (Amounts reported on Health Premiums, Line (20))			
Line (21)	Disability Income – Group Short Term	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million less the premium in lines (17) + (18) + (19) + (20) up to 50 million		X 0.077 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) over 50 Million not included above subject to 0.077 factor		X 0.046 =	
		Total (Amounts reported on Health Premiums, Line (21))			

Line (22)	Noncancellable Long-Term Care - Individual Morbidity	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million		X 0.539 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) over 50 Million		X 0.231 =	
		Total (Amounts reported on Health Premiums, Line (18))			
Line (23)	Other Long-Term Care – Individual Morbidity	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million less the premium in line (18) up to 50 million		X 0.385 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) not included above subject to the 0.385 factor		X 0.231 =	
		Total (Amounts reported on Health Premiums, Line (13))			
Line (24)	Long-Term Care - Group Morbidity	Earned Premium (Schedule H, Part 1, Line 2, in part) first 50 Million less the premium in line (18) or (19) up to 50 million		X 0.385 =	
		Earned Premium (Schedule H, Part 1, Line 2, in part) not included above subject to the 0.385 factor		X 0.231 =	
		Total (Amounts reported on Health Premiums, Line (20))			

Line (26)
Premiums for Workers Compensation Carve-Out are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The RBC Requirement is assessed on these premiums can be found on page LR018 Underwriting Risk – Other, Line (4).

Line (~~26~~27)
It is anticipated that most health premium will have been included in one of the other lines. In the event that some coverage does fit into any of these categories, the "Other Health" category continues the RBC factor from the 1998 and prior formula for Other Limited Benefits Anticipating Rate Increases.

UNDERWRITING RISK – EXPERIENCE FLUCTUATION RISK

LR017

The underwriting risk generates the RBC requirement for the risk of fluctuations in underwriting experience. The credit that is allowed for managed care in this worksheet comes from LR019 Underwriting Risk - Managed Care Credit page.

Underwriting risk is present when the next dollar of unexpected claims payments comes directly out of the company's capital and surplus. It represents the risk that the portion of premiums intended to cover medical expenses will be insufficient to pay such expense. For example, an insurer may charge an individual $100 in premium in exchange for a guaranty that all medical costs will be paid by the insurer. If the individual incurs $101 in claims costs, the company's surplus will decline because it did not charge a sufficient premium to pick up the additional risk for that individual.

There are other arrangements where the insurer is not at risk for excessive claims payments, such as when an insurer agrees to serve as a third-party administrator for a self-insured employer. The self-insured employer pays for actual claims costs, so the risk of excessive claims experience is borne by the self-insured employer, not the insurer. The underwriting risk section of the RBC formula therefore requires some adjustments to remove non-risk business (both premiums and claims) before the RBC requirement is calculated.

Claims Experience Fluctuation

The RBC requirement for claims experience fluctuation is based on the greater of the following calculations:

A. Underwriting risk revenue times the underwriting risk claims ratio times a set of factors.

or

B. An alternate risk charge that addresses the risk of catastrophic claims on any single individual. The alternate risk charge is calculated for each type of health coverage, but only the largest value is compared to the value from A. above for that type. The alternate risk charge is equal to twice the maximum retained risk on any single individual in a claims year. The maximum retained risk (level of potential claim exposure) is capped at $1,500,000 for Comprehensive Medical; $50,000 for Medicare Supplement business and $50,000 for dental coverage.

Line (1) through Line (18)

There are three lines of business used in the Life RBC formula for calculating the RBC requirement in this worksheet. Other health coverages will continue to use the factors on LR016 Health Premiums. The three lines of business are: Column (1) Comprehensive Medical and Hospital, Column (3) Medicare Supplement and Column (4) Dental & Vision. The other columns of LR017 are not to be used. Each of the three lines of business has its own column in the Underwriting Risk - Experience Fluctuation Risk table (For life RBC, Column (2) Medical Only and Column (5) Other are not used). The categories listed in the columns of this worksheet include premiums plus all risk revenue that is received from another MCO in exchange for medical services provided to such MCO's members. The descriptions of the items are described as follows:

Comprehensive Medical & Hospital

Includes policies providing for medical coverages including hospital, surgical, major medical, Medicare risk coverage (but NOT Medicare Supplement), and Medicaid risk coverage. This category DOES NOT include administrative services contracts (ASC) or administrative services only (ASO) contracts. These programs are reported in the Business Risk section of the formula. Neither does it include Federal Employees Health Benefit Plan (FEHBP) business which is reported on LR018 Underwriting Risk – Other Line (3). The alternative risk charge, which is twice the maximum retained risk after reinsurance on any single individual, cannot exceed $1,500,000.

Medical Only (non-hospital professional services)

Include in Comprehensive Medical.

Medicare Supplement

This is business reported in the Medicare Supplement Insurance Experience Exhibit of the annual statement. Medicare risk business is reported under comprehensive medical and hospital.

Dental & Vision

These are premiums for policies providing for dental or vision only coverage issued as stand alone dental or as a rider to a medical policy which is not related to the medical policy through deductibles or out-of-pocket limits.

Other Health Coverages

Include in the appropriate line on page LR016 Health Premiums.

The following paragraphs explain the meaning of each line of the worksheet table for computing the experience fluctuation underwriting risk RBC.

Line (1) Premium
This is the amount of money charged by the insurer for the specified benefit plan. It is the earned premium, net of reinsurance. It does not include receipts under administrative services only (ASO) contracts; or administrative services contracts (ASC); or any non-risk business; or premium for the federal employees health benefit programs (FEHBP) which has a risk factor relating to incurred claims reported separately under Underwriting Risk – Other, Line (3).

NOTE: Where premiums are paid on a monthly basis they are generally fully earned at the end of the month for which coverage is provided. In cases where the mode of payment is less frequent than monthly, a portion of the premium payment will be unearned at the end of any given reporting period.

Line (2) Title XVIII Medicare
This is the earned amount of money charged by the insurer (net of reinsurance) for Medicare risk business where the insurer, for a fee, agrees to cover the full medical costs of Medicare subscribers.

Line (3) Title XIX Medicaid
This is the earned amount of money charged by the insurer for Medicaid risk business where the insurer, for a fee, agrees to cover the full medical costs of Medicaid subscribers.

Line (4) Other Health Risk Revenue
Earned amounts charged by the reporting company as a provider or intermediary for specified medical (e.g. full professional, dental, radiology, etc.) services provided to the policyholders or members of another insurer or managed care organization (MCO). Unlike premiums, which are collected from an employer group or individual member, risk revenue is the prepaid (usually on a capitated basis) payments, made by another insurer or MCO to the company in exchange for services to be provided or offered by such organization. Payments to providers under risk revenue arrangements are included in the RBC calculation as underwriting risk revenue and are included in the calculation of managed care credits. Exclude fee-for-service revenue received by the company from an MCO. This revenue is reported in the business risk section of the formula as Health ASO/ASC and limited risk revenue.

Line (5) Underwriting Risk Revenue
The sum of Lines (1.3) through (4).

Line (6) Net Incurred Claims
Claims incurred (paid claims + change in unpaid claims) during the reporting year (net of reinsurance) that are arranged for or provided by the insurer. Paid claims includes capitation and all other payments to providers for services to covered lives, as well as reimbursement directly to insureds (or their providers) for covered services. Paid claims also includes salaries paid to company employees that provide medical services to covered lives and related expenses. Line (6) does not include ASC payments or federal employees health benefit program (FEHBP) claims.

Column (1) claims come from Schedule H Part 5 Column 1 Line 13 less the amounts reported as incurred claims for Administrative Services Contracts (ASC) in Line (51) of LR025 Business Risk and Federal Employee Health Benefit Plan (FEHBP) in Line (3) of LR018 Underwriting Risk – Other. Note that Medicare supplement claims could be double counted if included in Column 1 of Schedule H Part 5 rather than Column 3. Column (3) claims come from General Interrogatories Line 28e. Column (4) dental claims come from Schedule H Part 5 Column 2 Line 13.

Line (7) Fee-for-Service Offset

Report fee-for-service revenue that is directly related to medical expense payments. The fee-for-service line does not include revenue where there is no associated claim payment (e.g. fees or charges to non member/insured of the company where the provider of the service receives no additional compensation from the company) and when such revenue was excluded from the pricing of medical benefits.

Line (8) Underwriting Risk Incurred Claims

Line (6) minus Line (7).

Line (9) Underwriting Risk Claims Ratio

Line (8) / Line (5). If either Line (5) or Line (8) is zero or negative, Line (9) is zero.

Line (10) Underwriting Risk Factor

A weighted average factor based on the amount reported in Line (5), Underwriting Risk Revenue.

	$0 - $3 Million	$3-$25 Million	Over $25 Million
Comprehensive Medical	0.150	0.150	0.090
Medicare Supplement	0.105	0.067	0.067
Dental	0.120	0.076	0.076

Line (11) Base Underwriting Risk RBC

Line (5) x Line (9) x Line (10.3).

Line (12) Managed Care Discount

A managed care discount, based on the type of managed care arrangements an organization has with its providers, is included to reflect the reduction in the uncertainty about future claims payments attributable to the managed care arrangements. The discount factor is from Line (11) of LR019 Underwriting Risk - Managed Care Credit.

Line (13) Base RBC After Managed Care Discount

Line (11) x Line (12).

Line (14) RBC Adjustment for Individual

The average Experience Fluctuation Risk charge is increased by 20 percent for the portion relating to Individual Medical Expense premiums in column (1). Other types of health coverage do not differentiate Individual and Group. The additional time necessary to develop sufficient data to make a premium filing with States and then to implement the premium increase was modeled to calculate this factor.

Line (15) Maximum Per-Individual Risk After Reinsurance

This is the maximum loss after reinsurance for any single individual. Where specific stop-loss reinsurance protection is in place, the maximum per-individual risk after reinsurance is equal to the highest attachment point on such stop-loss reinsurance, subject to the following:

- Where coverage under non-proportional reinsurance or stop-loss protection with the highest attachment point is capped at less than $750,000 per insured for Comprehensive Medical and $25,000 for the other two lines, the maximum retained loss will be equal to such attachment point plus the difference between the coverage maximum per claim and $750,000 or $25,000, whichever is applicable.

- Where the non-proportional reinsurance or stop-loss protection is subject to participation by the company, the maximum retained risk as calculated above will be increased by the company's participation in claims in excess of the attachment point, but not to exceed $750,000 for Comprehensive Medical and $25,000 for the other two coverages.

If there is no specific stop-loss or reinsurance in place, enter the largest amount payable (within a calendar year) or $9,999,999 if there is no limit.

Examples of the calculation are presented below:

EXAMPLE 1 (Insurer provides Comprehensive Care):

Highest Attachment Point (Retention)	$100,000
Reinsurance Coverage	90% of $500,000 in excess of $100,000
Maximum reinsured coverage	$600,000 ($100,000 + $500,000)
Maximum Retained Risk =	$100,000 deductible
	+$150,000 ($750,000 - $600,000)
	+$50,000 (10% of $500,000 coverage layer)
	=$300,000

EXAMPLE 2 (Insurer provides Comprehensive Care):

Highest Attachment Point (Retention)	$75,000
Reinsurance Coverage	90% of $1,000,000 in excess of $75,000
Maximum reinsured coverage	$1,075,000 ($75,000 + $1,000,000)
Maximum Retained Risk =	$75,000 deductible
	+ 0 ($750,000 - $1,075,000)
	+$67,500 (10% of $675,000 coverage layer)
	=$142,500

Line (16) Alternate Risk Charge
Twice the amount in Line (15), subject to a maximum of $1,500,000 for comprehensive medical and $50,000 for the other lines.

Line (17) Net Alternate Risk Charge
The largest value from Line (16) is retained for that column in line (17) and all others are ignored.

Line (18) Net Underwriting Risk RBC
The maximum of Line (14) and Line (17).

UNDERWRITING RISK - OTHER

LR018

Lines (1) and (2)

In addition to the general risk of fluctuations in the claims experience, there is an additional risk generated when insurers guarantee rates for extended periods beyond one year. If rate guarantees are extended between 15 and 36 months from policy inception, a factor of 0.024 is applied against the direct premiums earned for those guaranteed policies. Where a rate guaranty extends beyond 36 months, the factor is increased to 0.064. This calculation only applies to those lines of accident and health business which include a medical trend risk (i.e., Comprehensive Medical, Medicare Supplement, Dental, Stop-Loss and Minimum Premium and Other Limited Benefits Anticipating Rate Increases). Premiums entered should be the earned premium for the current calendar year period and not for the entire period of the rate guarantees. Premium amounts should be shown net of reinsurance only when the reinsurance ceded premium is also subject to the same rate guarantee.

Line (3)

A separate risk factor has been established to recognize the reduced risk associated with safeguards built into the federal employees health benefit program (FEHBP) created under Section 8909(f)(1) of Title 5 of the United States Code. Claims incurred are multiplied by 2 percent to determine total underwriting RBC on this business.

Lines (4) through (6)

Separate risk factors have been established for Workers Compensation Carve-Out business. A factor of 0.364 is applied against net premiums written as shown in the Workers Compensation Carve-Out Supplement. A factor of 0.347 is applied against total net losses and expenses unpaid as shown in Schedule P, Part 1 of the Workers Compensation Carve-Out Supplement. These factors are taken from the industry component used in the P&C RBC formula for workers compensation reinsurance assumed.

A factor of 0.095 is applied against reinsurance recoverable balances on reinsurance ceded to non-affiliated companies (except certain pools), as shown in Schedule F, Part 2 of the Workers Compensation Carve-Out Supplement. This factor represents the difference between the total charge for reinsurance recoverables in the P&C RBC formula and the effective post-tax factor already reflected in the Life & Health formula on page LR014 Reinsurance. The following types of cessions are exempt from this charge: cessions to State Mandated Involuntary Pools and Associations or to Federal Insurance Programs, cessions to qualifying Voluntary Market Mechanism Pools and Associations (where there is joint liability for pool members along with adequate spread of risk, such that the risk of the pool collapsing from one or a few individual member solvency problems is immaterial), and cessions to U.S. Parents, Subsidiaries, and Affiliates. Qualifying Voluntary Market Mechanism Pools must be manually entered on Line (6.1) to receive the exemption.