AMERICAN ACADEMY of ACTUARIES

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January 11, 2021

Steve Drutz
Chair, Health Risk-Based Capital (E) Working Group
National Association of Insurance Commissioners (NAIC)

Re: Request for Analysis to Incorporate Investment Income into the Underwriting Risk Component of the Health Risk-Based Capital Formula

Dear Mr. Drutz:

On behalf of the American Academy of Actuaries (Academy)[1] Health Solvency Subcommittee, I am pleased to provide this response letter to the NAIC Health Risk-Based Capital (HRBC) Working Group. This letter is in response to the request from the HRBC Working Group to provide additional detail regarding the potential investment income adjustment factor for Health H2 Experience Fluctuation Risk.

Incorporation of Investment Income into H2 Risk Factors

As described in our letter dated December 15, 2020, the property and casualty (P&C) framework with respect to the Investment Income Adjustment (IIA) within the P&C Net Written Premium Risk (akin to the Health H2 Experience Fluctuation Risk), the base RBC charge amounts to:

*Premium * (IIA * Risk_Factor + Expense_Ratio - 1)*

The IIA*Risk_Factor expression is the discounted loss ratio at the target safety margin (87.5th percentile for P&C). Then, the IIA*Risk_Factor + Expense_Ratio -1 is the discounted operating loss at the target safety margin.

For Comprehensive Major Medical, if a 9% expense ratio (based on high-level industry benchmarking of health plan administrative expenses, excluding loss adjustment expense) is assumed and no IIA (i.e., an IIA of 1.0), then the underlying Risk Factor is 100%. This is essentially the loss plus loss adjustment expense ratio at the target safety margin implied by the Health RBC formula.

[1] The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

The table below summarizes a range of risk factors if an investment income adjustment was applied, assuming a consistent 100% loss and loss adjustment expense ratio and a 9% expense ratio.

Investment Return (a)	Investment Income Adj. (b)	Loss Ratio at safety margin (c)	Expense Ratio (d)	Discounted Risk Factor (b)*(c)+(d)-1
0.0%	1.0000	100%	9%	9.00%
0.1%	0.9999	100%	9%	8.99%
0.5%	0.9993	100%	9%	8.93%
1.0%	0.9987	100%	9%	8.87%
1.5%	0.9980	100%	9%	8.80%
2.0%	0.9974	100%	9%	8.74%
3.0%	0.9960	100%	9%	8.60%

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If you have any questions or would like to discuss further, please contact Matthew Williams, the Academy's senior health policy analyst, at williams@actuary.org.

Sincerely,

Derek Skoog, MAAA, FSA
Chairperson
Health Solvency Subcommittee
American Academy of Actuaries

Cc: Crystal Brown, Senior Insurance Reporting Analyst