



AMERICAN ACADEMY *of* ACTUARIES

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**AMERICAN ACADEMY OF ACTUARIES**  
**HEALTH ORGANIZATION RISK BASED CAPITAL TASK FORCE**  
**Chair: Burt Jay**

**March 2000 Progress Report to NAIC:**  
**Health Organization Risk Based Capital Working Group**  
**Life Risk Based Capital Working Group**

The American Academy of Actuaries 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 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.

### DI RBC Work Group:

The experience surveys have been returned to all of the companies that furnished 10 or more years of data. We are requesting them to check and explain unusual data. The number of companies with 10 or more years of experience were as follows: 9 for group LTD, 5 for group STD, 9 for individual non-cancelable, 4 for other individual and none for credit or accident only. The Work Group may use some data from statutory annual statements to supplement data contained in the surveys.

A new DI simulation model has been built. It models the same dynamics as the 1994 model but in a simpler manner. The new model has a direct parallel between how volatility is extracted from the data and how it will be used in the model. In 1994, the connection between the volatility in the data and the treatment in the model was more complex. The model reacts to experience on prior business by increasing or decreasing premiums on new business.

The new DI model develops RBC factors as a percentage of premiums for stationary blocks of business. The premium factor determined by the model needs to be split into two separate requirements, one as a percentage of earned premiums and one as a percentage of disabled life reserves. The method for splitting the requirement is still being considered.

The Work Group would still like to present a recommendation by the June NAIC meeting but delays in receiving company experience has retarded progress and could extend the project beyond June.

### LTC RBC Work Group:

The Work Group has been divided into a Modeling Team and an Issues Team. Each team is planning to meet bi-weekly by conference call.

The Modeling Team will decide between the M&R model, the Northwestern Mutual model and the model developed by the DI Work Group as to which will be the primary model. It has been determined that the two "home grown" models, the Northwestern Mutual and the DI, could be easier to modify, if necessary. The team will also determine whether to adjust loss ratios for change in reserves and interest, how to adjust for utilization trend and non-stationary and how to determine the individual claim distribution.

The Issues Team will determine other input assumptions, such as profit target, phase-in factor for delay in rating action, ruin probability, dividend policy, FIT rate and time horizon of the projections.

The timetable of the LTC Work Group indicated conducting most of the modeling runs during March and developing a final recommendation by May 15<sup>th</sup>. The projected time line assumes a limited number of unexpected problems.

Stop-Loss RBC Work Group:

As of mid-February four companies had submitted their survey results to the Academy. Considerable time has been spent by Work Group members in tracking down the correct company contacts to send the surveys to. The Work Group did not receive a sufficient number of returned surveys to complete the necessary work for a March recommendation. A June recommendation is now targeted.

This Work Group will use the M&R model for the simulation work. The model will first be run with “made-up” experience data that is intended to bracket the actual historical data expected in the surveys. The Work Group expects to test three such hypothetical historical distributions, including the one used in the early 1990s work.

The M&R Team member will develop the “portfolio” or “statistical” distribution, which will be compared to the documentation of the early 1990s work. The primary portfolio distributions will be based on 100,000 lives. Sensitivity tests will also be run at the 25,000 and 300,000 lives level.

The above represents the activity of the Academy work groups since the December NAIC meeting. As such it does not include additional activities which are in planning to address asset issues in response to the February 17 conference call of the RBC Task Force.