AMERICAN ACADEMY *of* ACTUARIES

Outline of the Group Long-Term Disability Proposal of the American Academy of Actuaries' Group Long-Term Disability Work Group Presented to the National Association of Insurance Commissioners' Health Actuarial Task Force

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Statement of Purpose

This document provides a brief outline of the valuation proposal to be produced by the American Academy of Actuaries Group Long-Term Disability Work Group (Work Group) for the National Association of Insurance Commissioners (NAIC) Health Actuarial Task Force (HATF). The work group's final report will provide specifics regarding the work group's considerations and supporting arguments. The final report will contain a proposal to amend the current model regulation; in particular it introduces a new actuarial guideline that will support interpretation of the amended model regulation. This outline is intended to allow for critical review of the proposal by HATF prior to delivery of its proposal.

The intent of the new model regulation is to replace the current valuation table (1987 CGDT) with a new valuation table based on the 2008 Society of Actuaries (SOA) Long-Term Disability (LTD) Experience study. The work group acknowledges that there are additional valuation concerns—such as SSDI, other offsets, IBNR, reopen liabilities and investment return—that are outside the scope of its current effort. The proposal, however, is limited to the replacement of the 1987 termination table, including guidelines for the use of a new table.

The intent of the actuarial guideline is to provide well-defined instructions for the use of a new valuation table, including appropriate modifications for company-specific experience. Our recommended termination assumptions would be the basis for the minimum claim reserves calculation.

Valuation Table

The base valuation table is derived from the 2008 SOA LTD Experience study, which covers the period from 1997–2006. The 2008 table structure enhances the current standard—which varies by age at disability, gender, and elimination period—by adding several enhancements, specifically:

1. Recoveries and deaths are separately identified;
2. Termination rates vary by gross benefit amount, claim diagnosis, and the definition of disability (own occupation versus any occupation);
3. Elimination period adjustments vary by duration since the end of the elimination period[1].

The new valuation table will be referred to as the "2012 GLTD Valuation Table." While expectations are calculated for recoveries and deaths separately, both the actual and expected measures should use combined recoveries and deaths. The termination adjustments should apply equally to recoveries and deaths.

[1] The table of termination rates is still based on duration from the inception of the disability; only certain adjustments to the set of base tables vary based on the elimination period.

Valuation Table Margin

The 2012 GLTD valuation table is based on experience from 1997–2006, with two additional adjustment factors. First, death rates are multiplied by 85 percent at all durations to account for mortality improvement since the measurement period. Second, both recoveries and deaths are multiplied by 85 percent at all durations to provide an explicit valuation margin. The 15 percent margin was selected because it was the level sufficient to cover 85 percent of the carriers who contributed to the experience study.

Own Experience Adjustments

Unless subject to the exemption noted below, the appointed actuary is required to set the termination rates he or she will use as the credibility-weighted average of the company's own experience and the 2012 LTD valuation table. Determining the company's own experience will require the company to perform a study that measures its actual terminations (recoveries and deaths combined) divided by its expected terminations (determined by applying the 2012 LTD valuation table to its own exposures) for four separate claim duration groups. The company then will add an explicit margin to its own experience. The final termination rates will be determined by blending the company's own experience with the valuation table using credibility factors.

The following are the proposed prescriptions for how this process will work:

<u>Length of Study:</u> Five calendar years of experience with a suitable lag between the study end date and the valuation date of the claims.

<u>Frequency of Study:</u> We recommend that the actual-to-expected measurement be conducted annually, but that carriers be required to update the experience adjustment factors either:

a) Once every five years, or
b) In any year in which the calculated own experience adjustment would decrease the expected termination rates by more than 10 percent in any of the defined duration groups.

<u>Own Experience Margin:</u> The own experience margin varies between 5 percent and 15 percent; it is a function of the number of expected terminations by duration group. The explicit margin decreases as the number of expected terminations increases. The exact formula is spelled out in the actuarial guideline and is defined based on an objective of a 95 percent statistical confidence that the expected terminations will be less than the selected rates. The work group then added an additional 3 percent margin on top of the statistical margin. We then bound the result at 5 percent on the low end and 15 percent on the high end.

<u>Other Assumptions:</u> Carriers should use their own experience for durations of one to three months.

<u>Own Experience Measurement Exemption:</u> When the carrier has both fewer than 50 open claims disabled in the prior two years, defined by the valuation date, and fewer than 200 open claims disabled more than two years prior to the valuation date, that carrier may use terminations that are less than or equal to 100 percent of the 2012 GLTD valuation table.

Blending of Experience

Duration Groups: 4 to 24 Months, 25 to 60 Months, 61 to 120 Months, > 120 Months.
Four separate duration groups were defined—the objective was to have blocks that are broad enough to generate practical levels of credibility while retaining reasonable adherence to the proper shape of the termination curves by duration.

Credibility: Defined as the square root of the number of expected terminations divided by factors (M) that vary by duration group. These values are as follows:

Duration Group	*M*	Duration Group	*M*
4 to 24 Months	3,300	61 to 120 Months	2,100
25 to 60 Months	2,500	> 120 Months	1,700

The credibility factors were defined based on an objective that a carrier would be 100 percent credible when there was an 85 percent statistical confidence that the observed terminations will be within plus or minus 5 percent of the true expected terminations. We note the actual selections add subjective assumptions based on the variability of results by duration group.

Floor and Cap: The company experience adjustment factor (after credibility and margin) is capped at 130 percent for each of the four duration groups. In addition, the reserve must be as great as that based on 100 percent of the carrier's own experience (without margin) on all duration groups.

Implementation

The new table and guidelines will be applicable to disabled life reserves for all claimants disabled on or after a date to be specified (perhaps January 1, 2014). We recommend that carriers be allowed to apply the new table and guidelines to claimants disabled prior to the specified date as long as the following are true:

- The election applies to all reserves related to claims incurred prior to the specified date; and
- The election is final. That is, a carrier cannot alternate between standards.