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### ◆ INTRODUCTION

Ongoing losses, typically driven by adverse reserve development, and possible solvency impairments to blocks of long-term care insurance (LTCI) have been, and continue to be, concerning to state insurance regulators. Also, regulators have expressed that there may be a lack of uniform practice in the implementation of tests of reserve adequacy of LTCI reserves. *Actuarial Guideline LI—The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves* (AG 51) was recently implemented to address these concerns. AG 51 can be found in Appendix A on the next page

### ◆ HISTORY

A first draft of AG 51 was exposed by the Long-Term Care Valuation (B) Subgroup at the meeting of the Long-Term Care Actuarial (B) Working Group in December 2016 at the Fall National Meeting. A final draft of AG 51 was adopted by the Long-Term Care Valuation (B) Subgroup and the Long-Term Care Actuarial (B) Working Group on May 3, 2017. Adoption by the Health Actuarial (B) Task Force and the Health Insurance and Managed Care (B) Committee occurred in June 2017. Final adoption of AG 51 by the Executive (EX) Committee and Plenary took place on Aug. 9, 2017.

### ◆ AG 51 REQUIREMENTS

AG 51 is applicable to companies with more than 10,000 inforce lives covered by LTCI contracts as of the valuation date, and applies to LTCI contracts directly written or assumed through reinsurance. Accelerated death benefit products or other combination products where the substantial risk of the product is associated with life insurance or an annuity are not subject to AG 51. Its requirements are effective for reserves reported with the Dec. 31, 2017, and subsequent annual statutory financial statements.

Asset adequacy tests are generally performed by comparing assets supporting a company's entire block (all insurance products) to all its liabilities. The results of these tests may indicate that some product blocks may have deficient reserves and assets backing those reserves, but, in aggregate across all products, company-wide assets are sufficient to support company-wide liabilities. Companies subject to AG 51 are required to perform an asset adequacy test specific only to all inforce LTCI business, independent of results for other blocks of business within the company. This is sometimes referred to as a "stand-alone" asset adequacy test.

For the stand-alone test required by AG 51, a company must segregate the portion of its assets that support its LTCI liabilities and compare this to its currently held LTCI reserves.

The method of analysis used must conform to the Actuarial Standards Board's Actuarial Standard of Practice No. 22, *Statements of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health Insurers* (ASOP No. 22). According to ASOP No. 22, multiple asset adequacy analysis methods, including cash-flow testing (CFT) and gross premium valuation, are appropriate for this analysis. The requirements of AG 51 differ depending on whether CFT is used as the analysis method. Definitions of terms and concepts related to cash-flow testing as used in ASOP No. 22 can be found in Appendix B.

When using either CFT or other-than-CFT, the analysis can only incorporate premium rate increase assumptions that are based on a rate increase plan that is documented, is supported by and approved by company management, is highly likely to be undertaken, and contains rate increase requests and timelines segregated by jurisdiction.

#### Requirements When Using CFT

When CFT is used, the company must allocate investment income to the LTCI block of business in a manner consistent with the way investment income generated by the company-wide general account is managed. If the company uses a segment of the company-wide general account to manage the investment risk for LTCI business for functions other than performing the AG 51 asset adequacy analysis, the investment income generated by assets from that segment should be appropriately represented for the AG 51 asset adequacy analysis. The investment income determination is related to the discount rate used in the analysis.

If the CFT LTCI asset adequacy analysis indicates a reserve deficiency in the LTCI block, the deficiency may be offset with sufficiencies in reserves from the company's other blocks of business, but only if CFT is used for both the LTCI business and for all significant blocks of non-LTCI business within a company. If a reserve deficiency in the LTCI block is not offset with sufficiencies in the company's other blocks of business, then additional reserves must be established.

#### Requirements When Not Using CFT

If CFT is not used and asset cash flows are not explicitly modeled as they are when using CFT, the discount rate used in the AG 51 asset adequacy analysis must reflect con-

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## ACTUARIAL GUIDELINE LI (AG 51) OVERVIEW (CONTINUED)

sideration of the yield on current assets held to support reserves for the LTCI block, and also must consider future yields on assets purchased with future premium income and reinvestments.

If the other-than-CFT LTCI asset adequacy analysis indicates a reserve deficiency in the LTCI block, the deficiency may not be offset with sufficiencies in reserves from the company's other blocks of business. Additional reserves must be established to offset the deficiency.

### Appendix A

#### Actuarial Guideline LI

#### THE APPLICATION OF ASSET ADEQUACY TESTING TO LONG-TERM CARE INSURANCE RESERVES

### Background

The *Health Insurance Reserves Model Regulation* (#010) and the *NAIC Valuation Manual* (VM-25) contain requirements for the calculation of long-term care insurance (LTC) reserves. Regulators have observed a lack of uniform practice in the implementation of tests of reserve adequacy and reasonableness of LTC reserves. The reserve adequacy testing required by Model #10 and VM-25 does not provide regulators comfort as to the reserve adequacy of companies with material blocks of LTC business. As such, regulators must rely upon asset adequacy analysis required by the *NAIC Valuation Manual* (VM-30) to evaluate the solvency position of companies with sizable blocks of LTC business. This Guideline is intended to provide uniform guidance and clarification of requirements for the appropriate support of certain assumptions for the asset adequacy testing applied to a company's LTC block of contracts. In particular, this Guideline:

1. Specifies that the appropriate form of asset adequacy analysis may be in the form of a gross premium valuation or in a more robust form, such as cash-flow testing, with Actuarial Standards of Practice providing guidance in this area;
2. Clarifies the type of adequacy testing methods that must be used for aggregation with other blocks of business to be allowed for asset adequacy analysis purposes;
3. Requires a uniform approach to supporting acceptable assumptions regarding future LTC premium rate increases;
4. Provides requirements for documentation of assumptions associated with all key LTC risks; and

5. Provides requirements for documentation of standalone LTC asset adequacy testing results.

Note: It is anticipated that the requirements contained in this Guideline will be incorporated into the *NAIC Valuation Manual* (VM-30) at a future date, effective for a future valuation year. This Guideline will cease to apply to annual statutory financial statements at the time the corresponding VM-30 requirements become effective.

### Text

#### 1. Effective Date

This Guideline shall be effective for reserves reported with the December 31, 2017 and subsequent annual statutory financial statements.

#### 2. Authority

Pursuant to Section 1, paragraph 3, of VM-30 of the *NAIC Valuation Manual*, the commissioner shall have the authority to specify specific methods of actuarial analysis and actuarial assumptions when, in the commissioner's judgment, these specifications are necessary for an acceptable opinion to be rendered relative to the adequacy of reserves and related items.

#### 3. Scope

This Guideline shall apply to a company with over 10,000 *inforce* lives covered by long-term care insurance contracts as of the valuation date. All long-term care insurance contracts, whether directly written or assumed through reinsurance are included. Accelerated death benefit products or other combination products where the substantial risk of the product is associated with life insurance or an annuity are not subject to this Guideline.

#### 4. Asset Adequacy Analysis of LTC Business

- A. As stated in Actuarial Standard of Practice (ASOP) No. 22, multiple asset adequacy analysis methods, including cash-flow testing and gross premium valuation, are available to actuaries for this analysis.

The method of analysis used for LTC shall conform with ASOP No. 22 in recognition of the typical significant asset- and liability-related risks associated with LTC.

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## ACTUARIAL GUIDELINE LI (AG 51) OVERVIEW (CONTINUED)

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- B. Asset adequacy analysis specific to all inforce LTC business, and without consideration of results for other block of business within the company, must be performed for valuations associated with the December 31, 2017 and subsequent annual statutory financial statements. The analysis shall comply with applicable Actuarial Standards of Practice, including standards regarding identification of key risks. Material assumptions associated with the LTC business shall be determined testing moderately adverse deviations in actuarial assumptions.
- C. When determining whether additional reserves are necessary:
1. A reserve deficiency in the LTC block may be aggregated with sufficiencies in the company's other blocks of business for the purposes of developing an actuarial opinion, if cash-flow testing is used for both the LTC business and for all significant blocks of non-LTC business within a company. If a reserve deficiency in the LTC block is not offset with sufficiencies in the company's other blocks of business, then additional reserves shall be established as required by section 2.C.2. of *VM-30*.
  2. If cash-flow testing is not used for testing of the LTC business, then a reserve deficiency revealed from another method, e.g., a gross premium valuation, utilized for purposes of asset adequacy analysis of the LTC block under this Guideline shall not be offset with sufficiencies in the company's other blocks of business. The additional reserves under this Guideline shall be established based only upon the adequacy of the reserves in the LTC block.
- D. When determining the effect of investment returns or the time value of money:
1. In the case where cash-flow testing is used, the company must allocate investment income to the LTC block of business consistently with the way investment income generated by the General Account is managed. If, however, a segment of the General Account is used to manage the investment risk for LTC business, the investment income generated by assets from that segment should be appropriately represented within the asset adequacy analysis.

2. In the case where a gross premium valuation method is used or asset cash flows are not explicitly modeled, the discount rate used by the actuary must reflect consideration of the yield on current assets held to support the liability as well as future yields on assets purchased with future premium income and reinvestments or anticipated divestiture of existing assets.

The analysis shall only anticipate premium rate increases based upon a rate increase plan that is documented, is supported by and has been approved by management, is highly likely to be undertaken, and contains rate increase requests and timelines by jurisdiction. The assumptions used in the analysis should reflect a reasonable estimate of regulatory approved amounts and implementation timelines.

### 5. Documentation Required

The documentation requirements below are to be incorporated as a separate section of the appointed actuary's Actuarial Memorandum required by the *VM-30* or in a special Actuarial Memorandum containing LTC-specific information and shall be submitted to the commissioner of the company's state of domicile. The separate section of the company-wide Actuarial Memorandum or the special Actuarial Memorandum shall be available to other state insurance commissioners in which the company is licensed upon request to the company. The confidentiality provisions regarding the Actuarial Memorandum contained in *VM-30* are applicable to the separate section of the Actuarial Memorandum and to the special Memorandum.

- A. Results of the asset adequacy analysis of the LTC business shall be reported and documented in the separate section of the Actuarial Memorandum or the special Memorandum, as appropriate.
- B. Assumptions on mortality shall be documented to state the reference standard valuation table, if applicable, and explicitly cite adjustments, select factors, and mortality improvement factors, where applicable. If a reference standard valuation table is not used in setting the mortality assumption, then a table of rates and comparison of the applied rates to rates from an unmodified standard mortality table for sample issue ages shall be provided. A summary of experience or other actuarial support of assumptions used shall be documented.

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## ACTUARIAL GUIDELINE LI (AG 51) OVERVIEW (CONTINUED)

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- C. Assumptions on voluntary lapse shall be documented in table format by duration band and by other factors such as gender, marital status, with versus without inflation rider, and length of benefit period impacting the lapse assumption, where applicable. A summary of experience or other support of assumptions shall be documented.
- D. Assumptions on morbidity shall be documented and actuarial support of the assumption shall be provided. If an outside source is used as the basis for morbidity assumptions, then the rationale for the applicability of that source and any adjustments to the factors from that source shall be documented.
- E. Assumptions on investment returns and interest rates shall be documented. If a simplified approach is applied, such as implicit reflection of projected investment returns through the use of discount rates in a gross premium valuation as contemplated in Section 4.D.2., then justification shall be provided.
- F. Any rate increases already approved shall be documented by jurisdiction with approved implementation timelines. Assumptions on future rate increases shall be documented by policy form or policy grouping. Such documentation should adequately describe the way in which future rate increase assumptions are developed. Unless the appointed actuary has operational responsibility for carrying out the rate increase plan specified in Section 4.E., the Memorandum shall contain a signed and dated reliance statement from the person with operational responsibility for carrying out such actions that the rate increase plan(s) provided to the appointed actuary appropriately reflects management's plan.
- G. Documentation of any other material assumptions shall be provided.
- H. Documentation shall be provided for assumptions that have significantly changed from the prior year's analysis.

### *Appendix B*

ASOP No. 22 can be accessed at [www.actuarialstandardsboard.org/asops/statements-opinion-based-asset-adequacy-analysis-actuaries-life-health-insurers](http://www.actuarialstandardsboard.org/asops/statements-opinion-based-asset-adequacy-analysis-actuaries-life-health-insurers).



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