ACTUARIAL STANDARDS BOARD

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**Actuarial Standard**
**of Practice**
**No. 18**

# Long-Term Care Insurance

**Revised Edition**

**Developed by the**
**Long-Term Care Task Force of the**
**Actuarial Standards Board**

**Adopted by the**
**Actuarial Standards Board**
**January 1999**

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**(Doc. No. 064)**

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**APPENDIXES**

February 1999

**TO:** Members of Actuarial Organizations Governed by the Standards of Practice of the Actuarial Standards Board and Other Persons Interested in Long-Term Care Insurance

**FROM:** Actuarial Standards Board (ASB)

**SUBJ:** Revised Actuarial Standard of Practice No. 18

This booklet contains the revised edition of Actuarial Standard of Practice (ASOP) No. 18, *Long-Term Care Insurance*.

Revision to ASOP No. 18

In 1991, ASOP No. 18, *Long-Term Care Insurance*, was adopted by the Actuarial Standards Board. This text is a revision to that standard, developed by the Long-Term Care Task Force of the ASB. The reasons for producing a revised standard are as follows:

1. There have been a number of new developments in the field of long-term care (LTC) insurance, including new financing mechanisms, expansion of covered services in LTC insurance policies, the emergence of additional experience information, and changes in the regulatory environment. It was felt that these developments warranted a revised standard.

2. It seemed appropriate to modify the content of the standard. As originally developed, ASOP No. 18 had been somewhat educational in nature, because it addressed a new topic. While LTC insurance is still a relatively young industry, there has been enough progress in this field so that the standard no longer needs to have the same educational focus.

3. The ASB has revised the format for all actuarial standards of practice. This revised edition is in the current format, as adopted by the ASB in May 1996 for all future actuarial standards of practice.

4. Finally, there was some overlap between ASOP No. 18 and other ASOPs. This revised edition eliminates some of that duplication.

Exposure Draft

The proposed revision to ASOP No. 18 was exposed for review in May of 1998, with a comment deadline of September 1, 1998. Fourteen comment letters were received. The more significant or frequent comments were as follows:

1. Should the actuary use separate claim incidence rates and claim termination rates for nursing home and home care benefits? Several thoughts were expressed why the actuary needn't or couldn't always do so.

2. Several subjects were suggested for inclusion within the standard of practice, such as recent regulatory developments, loss ratios, data sources, and tax-qualified policies.

3. It was suggested that the subject of asset-liability management be highlighted instead of cash flow testing.

For a more detailed discussion of the points that were raised in the comment letters—including the items listed above—and how the task force responded to the commentators, please see appendix 2.

The Long-Term Care Task Force of the ASB appreciates all who submitted comment letters and comment postcards. The input was helpful in developing a final standard.

The ASB voted in January 1999 to adopt the revised edition of ASOP No. 18.

Long-Term Care Task Force of the ASB

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**ACTUARIAL STANDARD OF PRACTICE NO. 18**

# LONG-TERM CARE INSURANCE

**Revised Edition**

**STANDARD OF PRACTICE**

## Section 1. Purpose, Scope, and Effective Date

1.1 Purpose—This standard sets forth recommended practices for actuaries involved in designing, pricing, funding, or in evaluating liabilities for insurance contracts or similar arrangements providing long-term care (LTC) benefits.

1.2 Scope—This standard applies to actuaries when performing professional services for individual and group LTC insurance plans, LTC insurance benefits issued as riders or included within other insurance and annuity products, and self-insured plans providing LTC benefits. It is not intended to apply when LTC insurance benefits may be an immaterial feature of a contract providing other benefits.

If a conflict exists between this standard and applicable law, compliance with applicable law is not considered to be a deviation from this standard.

1.3 Effective Date—This revised standard is effective for work performed on or after June 1, 1999.

## Section 2. Definitions

The definitions below are defined for use in this actuarial standard of practice.

2.1 Activities of Daily Living (ADLs)—Basic functions used as measurement standards to determine levels of personal functioning capacity. Typical ADLs include bathing, continence, dressing, eating, toileting, and transferring (between bed and chair or wheelchair).

2.2 Adult Day Care—A program of social and health-related services designed to meet the needs of functionally or cognitively impaired adults, provided in a group setting other than the adult client's home.

2.3 Assisted Living Facility—A facility that provides residents some assistance with ADLs. Residents have apartments, rooms, or shared dwellings, and often share community living and dining areas with other residents. Usually meals, utilities, housekeeping, laundry,

ambulation assistance, and personal care supervision is provided. Staff members may supervise the self-administration of medication.

2.4 Cognitive Impairment—A deficiency in a person's short- or long-term memory; orientation as to person, place, and time; deductive or abstract reasoning; or judgment as it relates to safety awareness.

2.5 Continuing Care Retirement Community (CCRC)—A residential facility for retired people that provides stated housekeeping, social, and health care services in return for some combination of an advance fee, periodic fees, and additional fees.

2.6 Custodial Care—Care to help a person perform ADLs and other routine activities; also known as *personal care*. It is usually provided by people without professional medical skills. It is less intensive or complicated than skilled or intermediate nursing care, and can be provided in many settings, including nursing homes, assisted living facilities, adult day care centers, or at home.

2.7 Functional Impairment—The inability to perform one or more ADLs.

2.8 Guaranteed Renewable Contract —A contract which provides that the insured has the right to continue the insurance in force for a specified period by the timely payment of premiums, and that the insurer may not unilaterally change the contract during that specified period, except that premium rates may be revised by the insurer on a class basis.

2.9 Home Care—Care received at the patient's home, such as part-time skilled nursing care, custodial care, speech therapy, physical or occupational therapy, part-time services of home health aides, or help from homemakers or chore workers.

2.10 Hospice Care—A program that provides health care to a terminally ill person and counseling for that person and his or her family. Hospice care can be offered in a hospice setting established for this single purpose, a nursing home, or in the person's home, where nurses and social workers can visit the person regularly.

2.11 Instrumental Activities of Daily Living (IADLs)—Functions, more complex than ADLs, that are used as measurement standards of functioning capacity; examples include preparing meals, managing medications, housekeeping, telephoning, shopping, and managing finances.

2.12 Insurer—An entity that accepts the risk of financial losses or, for a specified time period, guarantees stated benefits upon the occurrence of specific contingent events, in exchange for a monetary consideration.

2.13 Intermediate Nursing Care—Care needed for persons with stable conditions that require daily, but not 24-hour, nursing supervision. Intermediate nursing care is less specialized than skilled nursing care and often involves more custodial care.

2.14 Long-Term Care (LTC)—A wide range of health and social services, which may include adult day care, custodial care, home care, hospice care, intermediate nursing care, respite care, and skilled nursing care, but generally not care in a hospital.

2.15 Long-Term Care Insurance Plan—A policy, contract, or arrangement providing LTC benefits, either on a stand-alone basis or as part of a plan that provides other benefits as well (except where the LTC benefits are an immaterial feature). The plan will usually describe requirements for benefit eligibility, covered services, benefit amount, benefit payment duration, maximum benefit amount, and other coverage features.

2.16 Nonforfeiture Benefits—Benefits that are available if premiums are discontinued.

2.17 Nursing Home—A facility that provides skilled, intermediate, or custodial care.

2.18 Respite Care—Temporary care for frail or impaired persons that allows volunteers to have a rest from care giving.

2.19 Skilled Nursing Care—Care provided by skilled medical personnel, such as registered nurses or professional therapists, but generally not care in a hospital.

## Section 3. Analysis of Issues and Recommended Practices

3.1 Coverage and Plan Features—When providing professional services with respect to an LTC insurance plan, the actuary should be aware of and take into consideration all pertinent provisions found in the LTC insurance plan, including benefit eligibility, covered services, benefit amounts, benefit payment duration, and other coverage features that may significantly impact cost. (Such provisions are discussed in more detail in appendix 1 under Current Practices.) These provisions apply primarily to stand-alone individual, association-sponsored group, or employer-sponsored group LTC insurance plans.

However, there are other insured and self-insured plans that include material LTC plan features and that may need special consideration. Such plans include the following:

a. Acceleration of Benefits under Life Insurance Contracts—Long-term care insurance benefits may be provided by the acceleration of benefits otherwise payable upon death under a life insurance product. The actuary should ensure that assumptions concerning the amount and timing of payments are determined consistently for the contingencies of both mortality and LTC morbidity.

b. Other Insurance Products—Insurance products that primarily provide benefits other than long-term care may be designed to provide considerable LTC benefits also. The actuary should consider that the methods and assumptions appropriate for such products might be different from those used for stand-alone LTC insurance plans.

c. Other Programs—Long-term care benefits can be provided by various administrative and risk-assuming programs, such as health maintenance organizations (HMOs), preferred provider organizations (PPOs), and exclusive provider organizations (EPOs). The actuary should consider that the LTC methods and assumptions appropriate for such programs might be different from those used for other LTC insurance plans.

d. Retirement Communities—Long-term care services may be provided for insureds living within retirement communities. How the insured pays for such services and what those services are can vary considerably among communities. The actuary should consider any unique implications of the community's administration or service delivery process for persons covered by such programs.

3.2 Assumption Setting—In order to estimate costs or evaluate liabilities, the actuary utilizes a number of assumptions. Actuarial assumptions in combination should reflect the actuary's professional judgment of future events affecting the incidence and cost of LTC benefits. In setting actuarial assumptions, the actuary should consider available experience data and reasonably foreseeable future changes in experience over the term of the benefit promises. Appropriate provisions for adverse deviation should be considered. Sections 3.2.1–3.2.8 below discuss important considerations for the actuary in setting actuarial assumptions for LTC insurance plans.

3.2.1 Morbidity Assumptions—The actuary should determine morbidity assumptions consistent with all significant plan features, including the types of LTC insurance benefits being provided, the types of optional benefits being provided, the plan's benefit eligibility criteria, the claim adjudication process, the benefit amounts and benefit limits, and exclusions.

In order to estimate total claim costs, the actuary, where appropriate, should establish claim incidence rates, claim termination rates, and costs of eligible benefits. Also where appropriate, these three components of the total claim costs should be established separately for at least nursing home, assisted living facility, and home care benefits. When setting assumptions for total claim costs, the actuary should consider at least the following:

a. the fact that the claim cost elements will vary by nursing home, assisted living facility, and home care;

b. the possible substitution effect among the various benefits in the instances where more than one type is available;

c. the effect of induced demand for LTC services due to the presence of LTC insurance;

d. the availability of benefits from other public and private programs such as Medicare, Medicaid, and Medicare supplement policies;

e. the availability of LTC services;

f. the effect of selection and classification of applicants;

g. the financial benefit to the claimant of remaining eligible for benefits; and

h. the effect of mortality on termination rates.

Specific data from the entity to which the actuary's calculations apply generally are preferable to data from other sources. Where such data are not adequately credible, industry data should be considered next in setting assumptions. As a last but sometimes necessary source, general population noninsured data may be utilized. When assumptions are being set, evaluated, or updated, the actuary should carefully evaluate data provided from any source, and consider modifications as appropriate.

Because selection and classification affect the incidence and termination rates of claim, the actuary should consider the underwriting and claim processes being utilized. These include, for example, the intensity of application questions, the marketing methods, the number and types of underwriting requirements, the number and definitions of underwriting classes, the effect of regulations on the underwriting and claim process, and the experience of the underwriting and claim personnel.

3.2.2 Mortality Assumptions—The actuary should consider the effects of both selection and classification of applicants on expected mortality experience and use a mortality table that appropriately reflects the expected mortality of the insureds.

3.2.3 Voluntary Termination (Lapse) Assumptions—Voluntary termination (lapse) assumptions are critical to the estimation of costs and to the evaluation of liabilities, because for most plans, higher lapse rates will produce lower expected costs. The actuary should select appropriate lapse assumptions, taking into consideration the method of marketing, policyholders expected to be covered, product and premium competitiveness, premium mode, premium payment method, nonforfeiture benefit, and the service of the entity providing the benefits. At the time any rate change is determined, the effect on voluntary lapses should be considered.

3.2.4 Expense Assumptions—Expense assumptions should be consistent with the entity's business plan and method of LTC insurance plan delivery. The actuary should consider the cost of product development, marketing, producer compensation (heaped versus level commissions, as well as regulatory controls over commissions), regulatory compliance, underwriting, issue, policyholder service, and claim administration.

3.2.5 Tax Assumptions—Tax assumptions should reflect the tax reserve basis of the plan and the premium, income, or any other applicable tax rates of the entity.

3.2.6 Investment Return Assumptions—The actuary should recognize the time value of money, especially for level-premium issue age products. The expected investment return used should be consistent with the initial and reinvestment returns on assets supporting the LTC insurance benefit promise. For loss ratio and reserve calculations, the actuary should be familiar with applicable regulatory considerations.

3.2.7 Mix-of-Business Assumptions—To the extent total financial results could be affected materially by the mix of business, assumptions should reflect the characteristics of the anticipated distribution of business. Some characteristics to consider are age, gender, marital status, underwriting classes, distribution system, and plan options (such as benefit period, elimination period, inflation option, daily benefit, and rider options).

3.2.8 Change-over-Time Assumptions—An LTC insurance plan is expected to remain in force for a very lengthy period of time. Accordingly, when such a plan is developed, the actuary should identify the assumptions for which experience is likely to change materially over the term of the plan and consider reflecting such expected changes when setting the assumptions. At the time of any subsequent review or revision of assumptions, the actuary should, in the same fashion, consider likely future changes in experience when setting assumptions for the remaining term of the LTC insurance plan.

3.3 Premium Rate Recommendations—Any premium rates recommended by the actuary should conform with statutory requirements, including those for loss ratios. Such recommended rates should reflect any premium guarantees of the contract. In developing such recommendations, the actuary should not use assumptions that are unreasonably optimistic. If a premium rate schedule is described by the actuary as applicable for the lifetime of the insured, the actuary should use assumptions that are consistent with that description and that have a reasonable probability of being achieved. In particular, the actuary should not rely on anticipated future premium rate increases to justify the selection of unreasonably optimistic assumptions when recommending premium rates. On the other hand, the actuary should not use assumptions that are unreasonably pessimistic. It may be appropriate, however, to include provision for adverse deviation in assumptions.

When an actuary makes recommendations regarding premium rates, he or she should be aware of any material variations in experience that would make changes in premium rates for in-force business advisable, and should recommend such changes in a timely fashion.

3.4 Reserve Determination—Reserves typically required by and appropriate for LTC insurance plans are premium reserves, contract reserves, and claim reserves for both

reported claims and incurred but not reported claims. Reserves may be calculated using the same methods as are utilized for other health insurance coverages. In calculating reserves, the actuary should use methods and assumptions in compliance with all applicable regulatory requirements and accounting standards, and should take into account the benefit features of the particular LTC insurance plan in question, including any optional benefits.

In setting statutory reserves, the actuary should be familiar with applicable reserve standards, such as the *Long-Term Care Insurance Model Regulation* and the *Minimum Reserve Standards for Individual and Group Health Insurance Contracts* of the National Association of Insurance Commissioners (NAIC) and the regulations of any states that govern the specific plan for which the reserves are to be calculated.

3.5 Sensitivity Testing—The actuary should perform sensitivity testing of reasonable variations in assumptions prior to finalization of assumptions. Where the data used for establishing actuarial assumptions have limited statistical credibility, the range of sensitivity testing should be expanded.

3.6 Cash Flow Testing—Because of the long-term nature of the LTC benefits, future liability cash flows may be different from future asset cash flows. Therefore, the actuary should consider cash flow testing as a potentially important part of any LTC insurance plan's financial analysis. This is especially true if LTC insurance is the sponsoring entity's only product or a major portion of the entity's business.

3.7 Experience Monitoring—The actuary should inform the sponsoring entity that experience data should be collected in a manner that permits an actuary to compare prior assumptions with emerging experience and assess the implications of any significant differences.

To the extent that industry or noninsured data were used in determining assumptions for estimating benefit costs or establishing reserves, an actuary reviewing LTC insurance plan experience should be aware of significant changes in such data. To the extent such changes are material, the actuary should apply such new data in a timely and appropriate fashion when reviewing the appropriateness of premium rates and reserves.

## Section 4. Communications and Disclosures

4.1 Documentation—Because an LTC insurance plan is expected to remain in force over a very lengthy period of time, all assumptions are subject to review and update on a regular basis. Therefore, the actuary should document the assumptions, processes used, and the general sources of the data in sufficient detail such that another actuary could use the documentation where appropriate.

The actuary should document in detail the assumptions used and the general sources of the data used for deriving such assumptions. For further guidance, the actuary is referred

to Actuarial Standard of Practice (ASOP) No. 23, *Data Quality*; ASOP No. 25, *Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages*; and ASOP No. 31, *Documentation in Health Benefit Plan Ratemaking*.

4.2 Disclosure—The actuary should disclose to the client or employer the sensitivity of the actuarial work to reasonable variations in assumptions. Documentation should be available for disclosure to the actuary's client or employer, and, where appropriate and proper, it should be made available to other persons when the client or employer so requests.

4.3 Prescribed Statement of Actuarial Opinion—This ASOP does not require a prescribed statement of actuarial opinion (PSAO) as described in the *Qualification Standards for Prescribed Statements of Actuarial Opinion* promulgated by the American Academy of Actuaries. However, law, regulation, or accounting requirements may also apply to an actuarial communication prepared under this standard, and as a result, such actuarial communication may be a PSAO.

4.4 Deviation from Standard—An actuary must be prepared to justify the use of any procedures that depart materially from those set forth in this standard and must include, in any actuarial communication disclosing the results of the procedures, an appropriate statement with respect to the nature, rationale, and effect of such departures.

## Appendix 1

## Background and Current Practices

*Note:* This appendix is provided for informational purposes, but is not part of the standard of practice.

### Background

Reasons for This Actuarial Standard of Practice —The utilization of long-term care (LTC) services has been increasing rapidly, and that growth is expected to continue in the decades ahead as the number of senior citizens increases dramatically. Paying for these services is expected to be a challenge for society for the foreseeable future. Many of the funding methods in use involve long-term contractual commitments and estimation of expected costs many years in the future—work that requires actuarial analysis and training.

However, this is still a relatively new field of actuarial work. The LTC insurance industry is a young one, and estimating future results is a difficult process for which standards beyond those already established for other products are appropriate. Some of the reasons that actuarial activity in LTC insurance is such a challenge include the following:

1. A very limited amount of data is available, especially data on insured lives. While the Society of Actuaries produced an LTC insurance experience study in 1995, based on experience from 1984–1991, this was the first such study and it was, of necessity, somewhat limited in scope.

2. Long-term care insurance products have changed considerably in recent years, in terms of the covered services, benefit design, and benefit eligibility criteria. As a result, there is no experience for the newer policy provisions.

3. New financing approaches are periodically being introduced, such as the funding arrangements for LTC services being provided by continuing care retirement communities and accelerated-benefit riders on other insurance products. These approaches might have quite different experience than traditional stand-alone LTC insurance policies.

4. Underwriting, marketing, distribution, and claim payment practices can be quite dissimilar under different LTC insurance financing plans, producing diverse results. This compounds the difficulty of developing homogeneous experience data from which to estimate future activity.

5. There is a very real possibility that consumers' behavior will change in the future in ways that will affect LTC insurance costs. The following are examples of such possible changes.

a. The use of LTC services may tend to increase when such services are provided in an increasingly insured environment. Increased availability of private or public LTC insurance could encourage much higher utilization of LTC services.

b. Construction of additional nursing home beds has been strictly controlled by many states in order to limit the escalation of Medicaid expenses. If those limitations were altered or entirely removed, nursing home utilization would be likely to change.

c. Medical advances might reduce LTC insurance costs by preventing or curing maladies requiring LTC services (e.g., a cure for Alzheimer's disease). However, medical advances could also increase the life expectancy of impaired persons and enable some persons who would have died to survive in an impaired condition.

d. Current attitudes associated with nursing home care might change over time. For example, if improved funding makes nursing homes more attractive places for care, utilization is likely to increase.

e. The high divorce rate and other changes in the family structure in society may reduce the number of family members available to care for the impaired, increasing the need for paid LTC services.

f. Changes may occur in government payment for long-term care, which could impact payment for LTC services under private insurance. Such governmental changes could also affect LTC utilization patterns or the rules relating to taxes on LTC insurance premiums and benefits.

g. New LTC services may be developed and the availability of existing services may increase substantially. As new services become available, they can cause changes in consumers' use of previously existing care services, as well as changes in total service utilization.

The belief is held by some, including some regulators, that standards or controls beyond those for other coverages are needed to protect consumers in the LTC insurance field. This is partly because most LTC users are senior citizens, who are perceived as having few financial options.

Further, many LTC insurance financing mechanisms involve financial commitments of very long duration. Private LTC insurance is required to be guaranteed renewable for the life of the insured. It is also a product characterized by an extremely high degree of advance funding, with most of the claim dollars paid out long after the policy is put into effect.

For all of the reasons stated above, an actuarial standard of practice for LTC insurance is appropriate.

## Current Practices

An Evolving Type of Coverage —Long-term care insurance is still a developing practice, and many diverse methods exist to measure the cost of a benefit design, devise a funding system, and evaluate liabilities. A basic part of an actuary's work in this field involves taking into consideration the pertinent provisions in the LTC insurance plan, such as the following:

1. Benefit Eligibility (Definition of Insured Event)—In order to qualify for benefits, an insured person may have to satisfy an elimination period, and must provide satisfactory evidence of benefit eligibility. Long-term care insurance plans may define benefit eligibility in several ways. The most common criteria for benefit eligibility are functional or cognitive impairment (as defined in the LTC insurance plan), and sometimes medical necessity. Benefit eligibility is also frequently dependent on the use of covered services or services on a day for which the benefit is payable.

2. Covered Services—An LTC insurance plan may provide coverage for only a limited set of LTC services or a very broad set. A particular plan might cover only nursing home care, or only home care, or could cover a combination of both. Any number of additional types of care, such as assisted living facility care, adult day care, and respite care, may also be covered. When coverage is included for different types of services, the coverage can either be integrated or non-integrated. One example of integrated benefits is a single lifetime benefit maximum that may be utilized for any combination of nursing home care or home care.

3. Benefit Amount—The amount payable for a given service, or for a given day of care, may either be a fixed contractual amount, such as $100 per day of eligibility, or may be related to the actual cost of services provided that day. In the latter case, the reimbursement may be either the full cost of services or a percentage of the cost, and may be capped at a particular daily maximum. If there is a daily maximum, it may vary depending on the type of service. The daily benefit amount may be increased under an inflation protection provision.

4. Benefit Payment Duration—There are different ways in which benefit length and frequency may be structured for payment. Some examples are as follows:

    a. Benefit Period of Consecutive Days—The maximum benefit period is defined as a stated number of days or years, and benefits are payable during a continuous period of time of that length, starting from the first day of eligibility. Under this approach, days without covered services may not result in a benefit payment, but do not extend the benefit period.

    b. Benefit Days—The maximum benefit period is defined as a stated number of days or years, and benefits are payable for days on which the insured person meets the eligibility requirements, until the maximum number of days or benefits have been paid. Under this approach, any day for which the insured is ineligible for benefits

does not count as part of the benefit period, and the benefit period is thereby extended.

c. Maximum Benefit—The maximum benefit is defined in terms of a total dollar amount, and benefits are payable until that amount has been paid. The total dollar amount may be increased under an inflation protection provision.

5. Other Coverage Features That May Significantly Impact Cost—Some examples of additional features that may be found in LTC insurance plans are the following:

a. an alternative plan of care provision, under which services not expressly covered under the insurance contract may become covered, usually when viewed as an appropriate substitute for a covered service;

b. a shortened benefit period provision, i.e., a type of nonforfeiture benefit under which the insured has paid-up coverage with a benefit period whose length is determined by the nonforfeiture benefit value that has accrued;

c. a restoration of benefits provision, under which an insured who has used a portion of the maximum benefit can have the full benefit restored after a stated minimum time period during which the insured person either did not use, or was ineligible for, benefits; and

d. a provider discount benefit provision, under which an insured is entitled to pay a provider of care a smaller charge than that published for services rendered.

Apart from the actual provisions in the LTC insurance plan, numerous forms of individual LTC insurance are being offered, ranging from stand-alone nursing home or home care coverage to combination or integrated products that cover a broad range of services in many locations. Long-term care insurance plans are available on both tax-qualified and nontax-qualified bases. There are also LTC insurance riders to life, disability, and annuity products that can enhance benefits, accelerate benefits, waive surrender charges, guarantee purchase rights, or offer conversion options.

The group market consists of both insured and self-insured plans. In either instance the employer or other sponsor may fund none, a portion, or all of the required contribution. Group coverages also can be extended to eligible groups such as association members, affinity groups, and congregate community residents.

Existing Practice —Much of the current practice employed by actuaries in performing their work with LTC insurance has been borrowed from the other individual and group insurance products. ASOP No. 18 provides actuarial guidance specific to LTC insurance. Technically, the individual and group methodologies employed in designing, pricing, funding, or in evaluating liabilities are not unique to practice in this area.

What is unique to practice in this field is that the actuary has had to rely heavily on noninsured data and emerging experience in performing his or her work. Given these limitations and reliability concerns, the actuary performing LTC insurance work dedicates much effort to sensitivity testing of assumptions.

The level funded structure of LTC insurance and the long potential time lags between receipt of premiums and their disbursement as benefits also requires the actuary to be sensitive to both the product's cash flow requirements and the appropriate investment strategies, as well as to monitor closely future trends in all actuarial assumptions.

## Appendix 2

## Comments on the Exposure Draft and Task Force Responses

The proposed revision to Actuarial Standard of Practice (ASOP) No. 18 was exposed for review in May 1998, with a comment deadline of September 1, 1998. Fourteen comment letters and twenty-two comment postcards were received. The Long-Term Care Task Force of the ASB carefully considered all comments received. Summarized below are the significant issues and questions contained in the comment letters, printed in roman type. The task force's responses are in **boldface**.

### Comment Postcard

As stated above, twenty-two comment postcards were received. There were four choices for responses given on the postcard, as follows: (1) I have no comments (eleven checked this box); (2) I concur with the content of the proposed ASOP (ten checked this box); (3) Except as indicated in the attached written comments, I concur with the content of the proposed ASOP (one checked this box); and (4) The proposed ASOP should be changed significantly as indicated in the attached written comments (none checked this box).

### General Observations

Many helpful comments were offered in the letters received, and all were read and discussed by the task force. Most commentators seemed quite pleased with the draft. Those comments that, in the task force's opinion, provided suggestions that improved the proposed standard are reflected in this revised edition as appropriate.

However, several commentators addressed issues that did not seem appropriate for an actuarial standard of practice, but seemed better suited for a practice note. For example, there were suggestions to include LTC tables of data from the Society of Actuaries, methods for pricing contingent nonforfeiture benefits, procedures for including risk-based capital in pricing, and even a request for a discussion of the risks and rewards of self-insurance. **The task force believes it would be best for these topics to be examined in more detail elsewhere, such as perhaps in practice notes or some other such forum.**

### Transmittal Memorandum Questions

In the transmittal memorandum, the task force posed seven questions, which have been condensed in this appendix. Commentators' responses to the questions follow, as well as the task force's responses in **bold**.

Transmittal Memorandum Question #1—Does this exposure draft provide clear guidance on the subject of assumption setting? Two commentators responded to this question, both of them satisfied with the extent of guidance. One noted, "The intent of a standard of practice, in my opinion, is to provide general guidance. It should not be a cookbook." **The task force did not make changes with regard to the level of detail already present.**

Transmittal Memorandum Question #2—Is it appropriate to require that claim incidence rates and claim termination rates be established separately for at least nursing home and home care benefits?

The issue of whether separate incidence and recovery rates should be required for nursing home and home care benefits elicited many comments. One commentator said that it is appropriate that rates be established separately. Others said that such separation should not be required in all instances, pointing out that such is a moot point for a product with only one of the benefits. It also is unnecessary for a product that triggers benefits only when the insured is judged disabled and the product doesn't require that the insured incur reimbursable costs. **The task force made several changes to section 3.2.1, Morbidity Assumptions, to reflect these helpful comments. For example, in the first sentence of the second paragraph, the task force added the phrase, *costs of eligible benefits*, as another element the actuary should consider in addition to claim incidence rates and claim termination rates, where appropriate, in estimating total claim costs. Further, as noted in section 3.2.1(a–b), these claim cost elements will vary by type of benefit, and there is a possible substitution effect among the various benefits. Finally, the list of items to consider when setting assumptions for total claim costs was also lengthened.**

Transmittal Memorandum Question #3—Has this proposed revision adequately addressed the mix-of-business assumptions? Several commentators thought that section 3.2.7, Mix-of-Business Assumptions, could be clarified and strengthened by identifying several other dimensions to the mix, such as marital status. **The task force agreed and revised the section accordingly.**

Transmittal Memorandum Question #4—Has section 3.2.8, Change-over-Time Assumptions, clearly addressed the requirement that the actuary consider that actual experience may change materially over time? Should the actuary be required to reflect such changes in assumptions being set? Two commentators asked that this section remain as is and that they had no recommended changes. Two other commentators spoke to the need to clarify the section. **The task force agreed with those supporting the wording in the first exposure draft. No changes were made to this section.**

Transmittal Memorandum Question #5—What is your response to the standard's requirement that the actuary not select unduly optimistic premium rate assumptions based on anticipated but undisclosed rate increases that are inconsistent with the premium rate schedule? One commentator observed the difficulty but importance of recommending premiums that are adequate though not redundant and recommended that no change be made to section 3.3, Premium Rate Recommendations. Another commentator asked that the task force address the offsetting pressures that state regulators may place upon actuaries who are pricing, and another asked that loss ratios be addressed here. Finally, one commentator stated that the last sentence of the first paragraph, *It is appropriate, however, to include provision for adverse deviation in any*

*recommendation*, should be deleted. **The task force continues to believe that the subjects of loss ratios and state regulations should not be addressed in this ASOP. However, two changes were made to the sentence regarding provision for adverse deviation, which now reads, *It may be appropriate, however, to include provision for adverse deviation in assumptions*.**

Transmittal Memorandum Question #6—What areas of actuarial practice have been omitted that should be addressed? One commentator suggested the standard observe that tax-qualified plans have different reserve requirements than nontax-qualified plans. Another suggested the standard address the NAIC's new contingent nonforfeiture benefit, and another suggested the standard address loss ratios. **Recognizing that these subjects are matters of state regulatory compliance, the task force does not believe they should be covered in an actuarial standard of practice. Regarding the suggestion for tax-qualified plans, the task force revised section 3.2.5, Tax Assumptions, to read as follows: *Tax assumptions should reflect the tax reserve basis of the plan and the premium, income, or any other applicable tax rates of the entity.***

Transmittal Memorandum Question #7—Are the coverage and plan features discussed in the appendix (now appendix 1) clear, and do they include the significant aspects an actuary encounters? One commentator suggested there were several omitted coverage and plan features: (1) assisted living facilities; (2) tax-qualified status of benefits; (3) care management; and (4) Medicare. **The task force responded to these four items as follows. As for the first point, the task force added a definition for *assisted living facility* (see section 2.3), and referenced it in section 3.2.1 (see the second paragraph) and in appendix 1 (see item (2) under the section, An Evolving Type of Coverage). As for the second point, the task force revised section 3.2.5, Tax Assumptions, and mentioned in appendix 1 (see the second to last paragraph under the section, An Evolving Type of Coverage) that both tax-qualified and nontax-qualified plans are sold. However, the task force doesn't believe a standard should attempt to fully address this constantly changing, unclear, and essentially nonactuarial matter.**

**As for care management, the task force added a new section 5(d) (see appendix 1, under the section, An Evolving Type of Coverage), as an example of another coverage feature; however, the task force believes that treatment of this subject feature and its many possible elements is not warranted in an ASOP. Finally, the task force believes that the subject of Medicare continues to be adequately treated as a consideration for actuaries in section 3.2.1(d).**

Section 2. Definitions

Two commentators suggested adding a definition for *assisted living facility*. **The task force agreed; see section 2.3.**

Section 2.10, Instrumental Activities of Daily Living (now section 2.11)—One commentator suggested adding the phrase *managing medications* to the examples of IADLs. **The phrase was added.**

Section 2.14, Long-Term Care Insurance Plan (now section 2.15)—One commentator observed that this definition does not describe the entities that may write such a plan, asking if an HMO or PPO might write such a plan. **This section defines the LTC insurance plan; it does not address which entities may write such plans. The task force intended not to limit such entities. All are covered by the standard.**

Section 3. Analysis of Issues and Recommended Practices

Section 3.2.1, Morbidity Assumptions—Several commentators addressed this section. One suggested that "the underwriting process" be added to the list of considerations. **The task force believes that this process is covered in section (d) (now section (f)).** Another suggested the phrase *elimination period* be added as another item to consider. **The task force believes this issue is addressed in the first paragraph of the section by the phrase, *the plan's benefit eligibility criteria*.**

One commentator questioned whether another ingredient of total claim costs isn't the cost of eligible benefits. Three others questioned the necessity of always establishing incidence and termination rates separately for different benefits, especially for reserves. Another pointed out the interrelationship among different benefits, with possible substitution effects among them. **As for the first point, the task force agreed and added *cost of eligible benefits* to the incidence and termination rates. As for the latter, the task force agreed that these were good points, and revised the second paragraph of the section to make it clear that the separation of claim costs between benefits is not mandatory but should be done where appropriate. In addition, two new items (see items (a) and (b)) were added to those considerations the actuary should make when setting assumptions for total claim costs. The intention of the task force when drafting this section was to permit the actuary flexibility when working with different types of plans but also to provide the actuary with a list of considerations.**

Section 3.2.3, Voluntary Termination (Lapse) Assumptions—Several commentators suggested some additional considerations be added to those that affect lapse rates, including changes in policy design that may increase rates. **The task force agreed. Several other examples were included, and a sentence was added to note that the effect on lapses from any rate change should also be considered.**

Section 3.2.7, Mix-of-Business Assumptions—**In response to two comment letters, the task force added *marital status* and *distribution system* to the list of characteristics to consider, but does not believe a standard of practice should address such assumptions in further detail. However, the task force agreed that this section needed to be clarified as to under what circumstances the business mix is material and did so by adding the lead-in phrase, *To the extent total financial results could be affected materially by the mix of business*.**

Section 3.2.8, Change-over-Time Assumptions—One commentator questioned whether this section is addressing the inclusion of a provision for adverse deviation. Another noted that the use of the phrase *actual experience* in the second sentence is misleading. **As for the first question, the answer is no; this topic is covered in section 3.3, Premium Rate**

**Recommendations. As for the latter comment, the task force agreed and deleted the word *actual*.**

Section 3.3, Premium Rate Recommendations—One commentator suggested replacing the phrase *any recommendation* at the end of the first paragraph with the word *assumptions*. **The task force made the change.** Another commentator suggested addressing *loss ratios* in this section. **The task force believes it is not appropriate to address this topic in this ASOP. No change was made.** One commentator suggested eliminating the last sentence of the first paragraph concerning the inclusion of a provision for adverse deviation. **As noted above, the task force did not delete the sentence but revised it to state that it may be appropriate to include provision for adverse deviation. The subject of how to price LTC insurance is not an easy activity to articulate in an actuarial standard of practice; indeed, it is not the proper role of a standard to do so. The task force stands by the carefully chosen words of this section.**

Section 3.4, Reserve Determination—One commentator suggested expanding the second paragraph to require the actuary to also be familiar with valuation methods and assumptions discussed in the actuarial literature. Another commentator suggested adding references to ASOP Nos. 7 and 14. **As for the first comment, the task force disagrees, believing that an actuarial standard of practice is not the place to reference sources in the actuarial profession or to treat any references on this subject in detail. Similarly, references to other ASOPs should be held to a minimum, since an actuary is bound by all standards.**

Section 3.6, Cash Flow Testing—One commentator suggested this section emphasize asset-liability management and not cash flow testing. **The task force believes that cash flow testing is appropriately a responsibility of the actuary, whereas asset-liability management often is at least partly beyond the scope of the actuary's responsibilities.**

The task force appreciates the many comments received by those practicing in LTC insurance and earnestly trying to help create the best standard of practice possible. The input was helpful in developing this revised edition of ASOP No. 18.