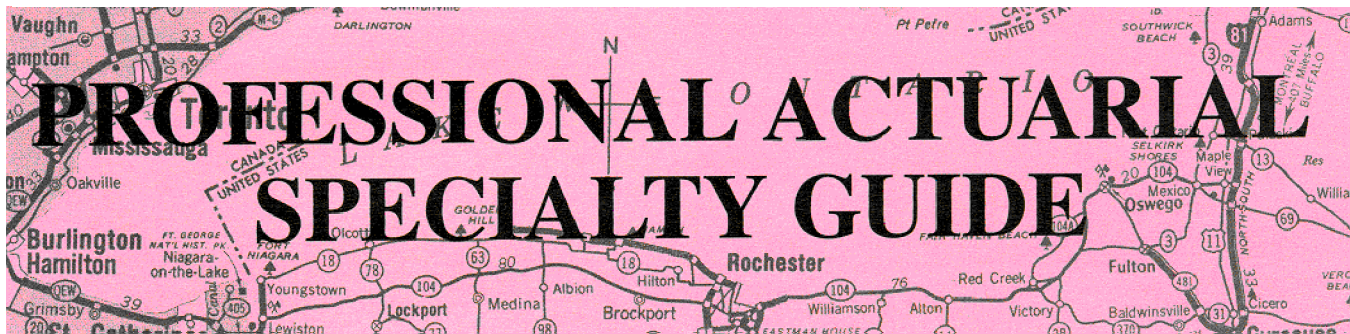


S O C I E T Y O F A C T U A R I E S



LONG-TERM-CARE INSURANCE

Overview

Long-term care (LTC) is currently very expensive, and costs are expected to increase in the future; furthermore, as the "baby boomers" reach old age, care will be needed for significantly more people. LTC insurance coverage is relatively new to the industry and has potential for tremendous growth. LTC products are attractive for middle-income or low-income/high-asset individuals who have become increasingly aware of potentially catastrophic LTC expenses and the limitations of government programs. Medicare covers limited LTC expenses, while Medicaid requires individuals to nearly deplete their assets in order to qualify for care in a Medicaid facility.

During the past several years, LTC insurance has become one of the newest and fastest growing insurance products, on both an individual and group basis. Many product designs have recently been expanded to include more than just nursing home coverage; they now cover home health care, adult day care, and respite care. This is primarily due to the National Association of Insurance Commissioners (NAIC) minimum standards, consumer market demand, and employer preferences.

The purpose of this Specialty Guide on LTC is to provide the reader with sources of information ranging from introductory to advanced, in the areas of LTC insurance design, marketing and pricing. Pricing LTC insurance is uniquely challenging because of the lack of credible data for insurance product LTC utilization, unlike other insurance products for which the SOA publishes tables based on experience. This risk especially pertains to newer benefits such as home health care. In addition, the long-term liability of LTC products, combined with regulatory and consumer pressure to limit future premium increases, creates a need for extreme care in developing assumptions for both the pricing and the valuation of LTC products.

Actuary's Role

Actuaries perform traditional duties of product development, valuation and experience analysis as well as other nontraditional duties for long-term-care insurance. In their traditional capacity, actuaries calculate premiums and reserves. They set pricing and reserve assumptions by interpreting sources of data on utilization that include noninsured public data. They prepare actuarial memoranda in conjunction with the filing for approval of contract forms and rates. They also perform experience analysis for statutory and internal management purposes. Actuaries in state insurance departments review contract form and rate filings. Actuaries are also involved in product research, development of underwriting guidelines and claims practices as well as the quotation process of group long-term-care insurance. They conduct reserve adequacy and cash-flow tests and contribute to the formulation of state regulations. For example, they provide actuarial evaluation of nonforfeiture benefits and rate

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General Background

The material in this section provides background information that is important to consider in developing LTC product designs, underwriting guidelines and pricing assumptions. These products and programs are still

A Shopper's Guide to Long-Term-Care Insurance. Kansas City, Mo.: National Association of Insurance Commissioners, 1992.

This guide contains basic information about long-term care, how much it costs, and who sells it. It gives an overview of how today's long-term-care insurance policies are designed and what consumers should look for when shopping for a long-term-care plan. A worksheet is included that allows a person to compare up to three long-term-care plans on an item-by-item basis.

Level: Basic

Pages: 35

Who Buys Long-Term Care Insurance? Washington, D.C.: Health Insurance Association of America Policy and Research Findings (with LifePlans, Inc), 1992.

This study was based on a 1990 national survey of individuals and employers regarding choices influencing the purchase of a LTC insurance policy. Sociodemographic characteristics, attitudes toward LTC risks and government roles are identified in the study.

Factors influencing purchase or nonpurchase decisions are listed. Percentages of purchasers for different benefit options (inflation, home care, duration, elimination periods, etc.) are also provided.

Level: Basic

Pages: 80

1992 Guide to Health Insurance for People with Medicare. Baltimore, Md.: National Association of Insurance Commissioners and Health Care Financing Administration of U.S. Department of Health and Human Services, 1992 (published annually).

This consumer publication contains a basic detailed description of Medicare, including beneficiary rights, definitions, and benefits in Parts A and B. Charts of Medicare-covered services and the 10 standard Medigap plans are included.

Nursing home and long-term-care insurance is described, referring to the NAIC *Shopper's Guide*. State-by-state referrals for counseling state insurance departments and state agencies on aging are listed.

Level: Basic

Pages: 30

AARP Public Policy Institute, *AARP Long-Term Care Fact Sheets*. Washington, D.C.: American Association of Retired Persons.

The American Association of Retired Persons publishes several fact sheets on long-term care. They contain numerous incidence and cost statistics. Some of these fact sheets are:

- FS15 "Long-Term Care," Van Ellet, April 1992.
- FS14 "The Cost of Long-Term Care," Van Ellet, April 1992.
- FS13 "Home- and Community-Based Long-Term Care," Enid Kassner, February 1992.
- FS10 "Nursing Homes," Van Ellet, December 1991.
- FS7 "Private Long-Term-Care Insurance," Van Ellet, May 1991.

Level: Basic

Rivlin, Alice M., and Joshua M. Wiener, *Caring for the Disabled Elderly: Who Will Pay?* Washington, D.C.: The Brookings Institution, 1988.

This book provides an overview of the problems in the current LTC delivery system and reviews both the private and public sectors strategies for reform. Of particular interest is the application of a LTC financing model to evaluate various policy alternatives.

Level: Basic

Pages: 318

Friedland, Robert B., "Facing the Costs of Long-Term Care," An Employee Benefit Research Institute Policy Study. Washington, D.C.: Employee Benefit Research Institute Education and Research Fund, 1990.

This book examines the impact of demographic shifts on long-term-care costs. It describes the structure of the nation's current financing and delivery system.

Private insurance is presented as an option for reform. The book explores in detail the elderly's ability to pay for long-term care, group LTC insurance as an employee benefit and the potentials of the public-private partnership.

Level: Basic

Pages: 365

Long-Term Care—Needs, Costs, and Financing. Washington, D.C.: Health Insurance Association of America, 1992.

This book provides a significant amount of information about long-term care and long-term-care insurance. Covered are such topics as what is long-term care, who needs it, how much is needed, who provides it, how much it costs, and what government, private industry and insurance companies are doing about it. Also discussed are possible future financing systems for long-term-care insurance.

Level: Basic

Pages: 203

"Long-Term Care—Who Needs It, Wants, or Can Pay For It?" *Record of the Society of Actuaries* Vol. 18, No. 4B (October 1992): p. 1851.

This session summarizes updates in several areas related to LTC insurance (including some nonactuarial issues):

- Pricing assumptions
- Sales survey: group and individual LTC, 1992 annualized average premiums, new and renewal
- 1991 HIAA LTC industry survey
- HIAA buyer's survey and trends
- Regulatory developments: Medicare, Medicaid
- Mandates: nonforfeiture, loss ratios, activities of daily living, home care benefits, premium increase caps
- State and federal legislation
- Affordability of LTC insurance.

Level: Intermediate

Pages: 59

"Installing Group Long-Term-Care Insurance," *Benefits Law Journal* Vol. 5, No.3 (Autumn 1992): p. 307.

Long-term-care insurance is a complex, highly specialized subject, as are large-group employee benefits. Designing, selecting and installing a successful group long-term-care plan for large-group employers is especially challenging. This article provides, through a case study, an "insider's" view of the practical considerations involved in the implementation of a large-employer long-term-care plan.

Level: Intermediate

Pages: 25

Regulation, Taxation, and Professional Standards

Regulation of LTC insurance primarily emanates from the NAIC model acts and regulations, which have recently been changing. Taxation of LTC insurance presents some unique issues, including a penalty related to contract reserves unintentionally caused in the IRS tax code. LTC is the only product with its own Actuarial Standard of Practice, due to the importance of actuarial professional responsibility in this emerging product

Actuarial Standards Board, "Long-Term-Care Insurance," *Actuarial Standard of Practice No. 18.* Washington, D.C.: American Academy of Actuaries, July 1991.

This is essential reading: a comprehensive, general guide for LTC actuarial work. The purpose of this standard is to provide guidance to the actuary practicing in the field of LTC insurance. This includes understanding the impact of rapidly changing LTC provider and delivery systems, demographic characteristics, technology, governmental actions, and costs of systems. It contains recommended practices to guide the actuary generally, without specifying ranges of acceptable practices or assumptions. It focuses on the actuary's responsibilities, considering regulatory and legal requirements. In addition to background and historical issues, it covers general issues related to LTC benefit design, actuarial assumptions (such as incidence, mortality, lapses and discount rates), sensitivity testing, cash-flow testing, experience data, underwriting, claim liabilities, contract reserve standards, and taxes.

Level: Basic

Pages: 18

"Long-Term-Care Insurance Model Regulation." Kansas City, Mo.: National Association of Insurance Commissioners, January 1993.

This regulation serves as a model for specific state regulation of LTC insurance. It defines LTC insurance, specifies standards for LTC product features (including home health care benefits) and sets forth marketing and disclosure requirements. It also includes reserving and loss ratio requirements. This model regulation is revised periodically.

Level: Basic

Pages: 28

"Long-Term Care—Have You Considered This?" *Record of the Society of Actuaries*, San Diego Meeting, Session 4PD, April 1993.

This discussion is one of the most important sources for up-to-date information on the following:

- Regulatory position and prospective impact of LTC rate guarantee legislation
- LTC risk-based capital and target surplus requirements
- Asset/liability cash-flow scenarios
- Effective tax rates on LTC insurance
- Other tax issues, such as IRS tax code

Level: Intermediate

Tape

Pricing — Theory, Data and Experience

Pricing LTC products poses a challenge for actuaries, in view of the combined effects of underwriting selection, disabled incidence, terminations, lapses, potential adverse selection, and mortality assumptions. Because the industry does not yet have reliable experience data for the current generation of LTC products (which include home health care), it is particularly important for the actuary to carefully evaluate and, if necessary, modify available data when developing assumptions.

"Pricing Long-Term Care," *Society of Actuaries Study Note 445-27-90*. Schaumburg, Ill.: 1990.

This study note reviews some of the more important considerations of pricing long-term-care policies. It also reviews reasonable assumptions for certain pricing factors such as lapse rates and underwriting adjustments. It contains a dated but extensive list of morbidity data sources.

Level: Basic

Pages: 125

Brown, Mary Ann, and Sandra K. Meltzer, "LTC Products: The Next Generation," *Emphasis 1* (1992): p. 2.

A summary of LTC design standards for both individual and group products is included, in addition to regulatory changes and rationale. Nonforfeiture and valuation issues and standards are also described. Taxation, proposed bills, related issues and potential changes are discussed.

Level: Basic

Pages: 7

The 8th Annual LTC Conference. Conference includes a technical session: "LTC Insurance: Design, Pricing and Regulation," September 9 and 10, 1992. Binder of conference may be difficult to obtain. Audio tapes available; Health Insurance Association of America, Washington, D.C.

Many sessions from this conference provide background data and sources useful for pricing data; the preconference set contains basic LTC information. Other meeting sessions cover: regulation, consumer protection, state public/private financing initiatives, home care benefit trade-offs (indemnity versus case management), marketing, and agent training.

The above-listed technical session covers pricing assumptions as related to design and regulation and includes some industry ranges in assumptions for: morbidity, lapses, mortality, earned rates, commissions, expenses, average size, age, distribution, tax, reinsurance, target surplus, profit goals, active life and claim reserves.

Level: Intermediate

Pages: 12 (above session)
300+ (conference)
(also audio tapes)

Long-Term-Care Experience Committee, "1985 National Nursing Home Survey Utilization Data." *Transactions, Society of Actuaries, Reports of Mortality, Morbidity and other Experience* (1988-89-90): p. 101.

This report presents tabulations of the 1985 National Nursing Home Survey on nursing home admission rates, average lengths-of-stay, and continuance tables. Two types of continuance tables are presented: one showing the proportion of days above selected thresholds and the other presenting the proportion of admissions still resident after selected periods.

Three sets of tabulations are presented. The first two sets include all residents in the survey. The first set is based on the "stay" concepts (where all stays are treated independently), and the second set is based on the "benefit period" concept (where stays that are interrupted by hospital episodes or involving transfers between nursing homes are combined into one stay). The third set, based on the benefit period concept, excludes residents with conditions that would make them uninsurable or that would not be covered.

The data are based on a general population survey and thus are not directly applicable to private insurance experience. Nevertheless, the data are in sufficient detail to be useful in actuarial models, with appropriate modifications.

Level: Intermediate

Pages: 64

Long-Term-Care Loss Experience Reports. Kansas City, Mo.: National Association of Insurance Commissioners.

This set of reports is required as part of annual statutory filing (due May 1 each year). These reports show yearly and cumulative actual-to-expected incurred loss experience by policy form. They also display active life reserves and policies in force by calendar year.

Level: Intermediate

Mahoney, Kevin, and Terrie Wetle, "Public-Private Partnership: The Connecticut Model for Financing Long-Term Care," *Journal of the American Geriatrics Society* 40, No. 10 (October 1992): p. 1026.

Wiener, Joshua M., and Raymond J. Hanley, "The Connecticut Model for Financing Long-Term Care: A Limited Partnership?" *Journal of the American Geriatrics Society* Vol. 40, No. 10 (October 1992): p. 1070.

These two papers describe the concept of public-private partnership and its role in LTC financing reform. Its potential strengths and drawbacks are also discussed.

Level: Intermediate

Pages: 8

1982-84 National Long-Term-Care Survey, A Health Care Financing Administration Survey. Public use tapes available from the U.S. Department of Commerce.

This survey sampled 36,000 Medicare beneficiaries in 1982, of whom 6,393 were identified as living in the community and having a limitation in one or more activities of daily living (ADL) or instrumental activities of daily living (IADL). The 1984 survey was a second cross-sectional survey that included many of the same individuals surveyed in 1982. The surveys give a good indication of the prevalence of frailty among the noninstitutionalized population 65 and over. Frailty is measured by ADL and IADL limitations as well as cognitive impairment.

Level: Advanced

Public Use Tapes

Advancedata Series, National Center for Health Statistics, U.S. Department of Health and Human Services.

There are several papers in this series that provide data on home- and community-based care. Some of these papers are as follows:

- #217 "Assistive Technology Features and Home Accessibility Features: Prevalence, Payment, Need and Trends," September 1992.
- #170 "Aging in the Eighties: The Prevalence of Comorbidity and Its Association with Disability," May 1989.
- #116 "Aging in the Eighties: Age 65 Years and Over and Living Alone, Contacts with Family, Friends, and Neighbors," May 1986.
- #92 "Americans Needing Help to Function at Home," September 1983.

Level: Advanced

Beekman, John A. "An Alternative Premium Calculation Method for Certain Long-Term-Care Coverage," *ARCH* (1990.2): p. 179.

The method for determining premiums for long-term-care insurance has yet to be standardized. This paper provides some insight on possible approaches to premium calculation. A concrete example is given. Included in the paper is a useful bibliography.

Level: Advanced

Pages: 20

Brookings Institution/ICF Long-Term Care Financing Model, Volumes 1-4, Washington, D.C.: Department of Health and Human Services, February 1992.

This four-volume report projects long-term-care utilization over the next 30 years. A variety of funding proposals were used to develop several alternative utilization projections. Projection results, modeling techniques and key utilization assumptions are explained in detail.

Level: Advanced

Manton, Kenneth G., "A Longitudinal Study of Functional Change and Mortality in the United States," *Journal of Gerontology* Vol. 43, No. 5 (1988): p. 153.

This paper is an introduction to the methodology used in the 1982 and 1984 National Long-Term-Care Surveys. It also presents the disability level specific estimates of two-year transitional probabilities for age and sex subgroups.

Level: Advanced

Pages: 9

"Longitudinal Study of Connecticut Nursing Home Patients," Hartford, Conn.: Connecticut Department of Health Services, July 1988.

This study is based on data collected from every admission to all Connecticut nursing homes from 1977 to 1985. Length-of-stay figures are given by various breakdowns including level of disability, sex, age and payment source. Rates of readmission are also given.

Supplemental data are available for the observation years of 1986 and 1987.

Level: Advanced Pages: 218

"Use of Home Health Services by Frail Elders." Boston: Massachusetts Executive Office of Elder Affairs, December 1988.

This report summarizes the home health care services that were received by a closed sample of elderly persons during calendar year 1987. Utilization figures are broken down by type of service, level of disability and living arrangement. Although dated, average costs are also shown by similar breaks.

Level: Advanced Pages: 36

Valuation and Nonforfeiture

Several industry committees are developing information on LTC valuation and nonforfeiture issues. Many states have adopted the NAIC Accident and Health Model Regulation for Individual and Group Valuation. The NAIC is proposing a mandated nonforfeiture benefit for LTC products, expected to be decided by

Society of Actuaries Task Force on Valuation Methods for Long-Term-Care Insurance, "Interim Report on LTC Valuation." Schaumburg, Ill.: Society of Actuaries, October 1992.

This interim report provides guidelines for the valuation of long-term-care insurance. Included are tables to be used, how they are to be applied and how the valuation should be influenced by underwriting, product features and benefit triggers. Also included is a discussion of the effect on reserves of changes in pricing and assumptions as well as a discussion of reserve adequacy and risk-based capital. A final report is expected in 1993.

Level: Intermediate Pages: 50

Inflation Protection and Nonforfeiture Benefits in Long-Term-Care Insurance Policies: Final Report by the NAIC LTC Actuarial Task Force for the NAIC LTC Task Force. Kansas City, Mo.: National Association of Insurance Commissioners, April 10, 1991.

Level: Intermediate Pages: 76

Final Report to the NAIC LTC Task Force from NAIC LTC Nonforfeiture Benefits Ad Hoc Actuarial Group. Kansas City, Mo.: National Association of Insurance Commissioners, June 2, 1992.

Level: Intermediate Pages: 172

Report on Shortened Benefit Period to the NAIC LTC Task Force from the NAIC LTC Nonforfeiture Benefits Ad Hoc Actuarial Group II. Kansas City, Mo.: National Association of Insurance Commissioners, September 20, 1992.

Level: Intermediate Pages: 78

These three reports explore the trade-offs between benefits and premiums for these two costly and controversial types of benefits: inflation protection and nonforfeiture benefits.

The reports were to provide the NAIC with factual information on definitions, options, assumptions, methods, and premium increases related to regulation on inflation protection and nonforfeiture benefits.

AARP Public Policy Institute, "Inflation Protection and Nonforfeiture Benefits in Long-Term-Care Insurance Policies: New Data for Decision Making," *Issues Paper 9203*, prepared by William M. Mercer, Inc. American Association of Retired Persons, June 1992.

This paper summarizes the impacts of inflation and nonforfeiture benefits on long-term-care policy premium rates. It investigates several alternative benefit premium structures.

The author uses his own pricing model and assumptions in calculating premium rates for various plan designs. Premium rates for actual carriers in the long-term-care market are also given for comparison purposes.

Level: Intermediate Pages: 98

Publishing and Ordering Information

For the following publications, please contact the publishers directly for books or reprints of articles.

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