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LIFE CARE/LONG-TERM CARE -- ACTUARIAL CONCERNS

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A definition of programs related to providing long-term care (primarily nursing care and residential services) for the aging population through Life Care Societies (LCSs), nursing care products, etc. Actuarial considerations related to LCSs combine life, health, and pension techniques in establishing funding requirements and evaluating liabilities.

MR. JON E. NIEHUS: During the last two years long-term care has emerged as a leading issue. Numerous articles about long-term care have appeared both in the trade and the popular press, and it has been a subject discussed in at least one Presidential news conference. Some reasons for long-term care arising as an important topic are as follows:

1. The over age 65 group is growing very rapidly and now represents about 12% of the total U.S. population. Those aged 85 and over are the fastest growing part of the older population. Due to advances in medical technology, people in this group are also living longer.

2. State government's costs to provide long-term care benefits under Medicaid are staggering. Medicaid is the source of payment in over half of nursing home confinements, and half of Medicaid payments are used to cover nursing home confinements. With cutbacks in Federal revenue sharing, the pressures on state finances will be even greater.

3. Public awareness of the devastating nature of long-term illnesses may be increasing. In order to qualify for Medicaid an individual must show financial need, either by spending or giving away most of his assets -- both rather unappealing choices but fairly widespread actions. In the absence of Medicaid or private insurance, an older person could face nursing home charges of $24,000 a year on the average. Two-thirds of all nursing home patients who start out paying their own bill run out of money after a year. On the other hand, a study done for AARP two years ago found that 79% of those respondents, who believed that they would at some point have extended stays in nursing homes, believed that Medicare would pay for all or part of it. The reality is that Medicare pays only 2% of the cost of nursing home care.

4. With an increasingly mobile society and two-paycheck families becoming the norm, many elderly people can no longer depend on their adult children for assistance. The majority of women can expect to outlive their husbands by five to ten years. Three-quarters of nursing home residents at ages 75 and over are female.

Despite the catastrophic nature of nursing home confinements, there is relatively little private insurance in effect -- only about 150,000 policies of which United Equitable has issued roughly half. Considering that over 28 million Americans are 65 years or older, the market for nursing home insurance is wide open and represents a tremendous opportunity for growth in the insurance industry. The challenge is to offer a nursing home product on a profitable basis.

At last year's annual meeting there was an excellent panel discussion on long-term care. This group outlined additional background information including product design considerations and alternative ways to fund and provide long-term care. My remarks will focus on the individual stand-alone long-term care products currently being marketed and some practical experiences with them.

At present there are some 15 to 20 companies issuing individual long-term nursing care policies providing benefits for at least one year. Several

additional companies will be releasing products in the near future, and a large number of these companies appear to be studying the feasibility of long-term care insurance. Hundreds of companies provide incidental nursing care coverage in Medicare Supplement and other types of contracts, but these policies will not be considered long-term care contracts for purposes of this presentation. The long-term care policies currently being sold have quite diverse characteristics.

Most long-term care policies provide benefits for both skilled and custodial care. Skilled care must be provided by professional-degree nurses and be available 24 hours a day. Custodial care can be provided by those without professional training. In either event, the care must be medically necessary. Some policies require that all care be provided in a licensed skilled care facility. The definitions of skilled and custodial care are often quite lengthy and the differences from policy to policy can be subtle but dramatic.

Typically, the insured must receive at least one day of skilled care before qualifying for custodial care. A longer required period of skilled care should theoretically reduce the cost of providing custodial benefits. On the other hand, where benefits differ by level of care, there will be tremendous pressure to consider various procedures as skilled care. The definitions of care will be scrutinized very carefully by policyholders, their families and their attorneys in an effort to collect benefits.

Many policies require a hospitalization period of at least three days within 14 to 30 days before the start of the nursing care confinement. Besides being consistent with Medicare, this requirement helps to establish the medical necessity for the confinement, and it is felt to be objective. This prior hospitalization requirement also seems useful as a gatekeeping device. To a large degree, long-term confinements are elective which reflects the ability, will and resources needed for independent living. In many cases, the decision for confinement will be made by someone other than the elderly person. I have not seen any data which shows the effect of this hospitalization requirement on claim costs. One company, however, studied their claims and concluded that only a few of the hospitalizations occurred solely to qualify a patient for

nursing home benefits. Another company offers their product with and without the hospitalization requirement; their premium differentials are quite large.

The maximum daily benefit for skilled care varies by company from about $40 to $120 per day. Although prevailing charges vary greatly by area, no company, to my knowledge, varies issue limits by area unless limits are applied informally during underwriting. In addition, virtually all policies have been issued on an indemnity basis with no attempt to relate policy benefits with actual costs. Only a few companies are requiring that the claimant share some of the cost in an effort to control costs. There also seems to be little attempt to coordinate benefits to prevent over-insurance. In some cases claimants may receive duplicate benefits from Medicare, Medicaid and private insurance. If the existence of the policy is disclosed, nearly all states now require that private insurance benefits be paid to the state for one to qualify for Medicaid benefits.

Typically, the charge level is a function of the type of facility -- skilled, intermediate or custodial -- rather than of the level of care given. In reality, confinements lasting more than three months are primarily custodial in nature. The care given is mostly for maintenance, rather than for restoration, of health.

Some policies provide identical benefits for all levels of care. Others provide half benefits for custodial care, and they limit coverage to a shorter period. Logically, custodial benefits should last longer than skilled benefits. The average stay in a custodial facility is over twice as long as in a skilled care facility. Providing benefit levels and benefit periods that differ for skilled and custodial care results in claim handling problems and severe pressures to interpret policy language liberally. Many custodial care claims could end up being paid as skilled care, which would lead to a significant increase in claim costs.

Maximum benefit periods for skilled care run from one to five years. Maximum benefit periods for custodial care are either the same or half as long as for skilled care. Maximum lifetime benefits usually equal or exceed a maximum

skilled care claim, representing a potential payout of over $200,000 under some policies.

Home health care or home convalescent benefits following a nursing home confinement are provided by some policies as an incentive to leave the nursing facility. Such benefits, and requirements to qualify for them, are even more diverse than the basic benefits. Most individuals prefer to receive care in their home for as long as possible before entering a nursing care facility. However, such benefits are not widely available in insurance products due to the concern about the induced demand and the "woodwork effect." Care should be taken not to duplicate home health care reimbursed by Medicare. A 1984 HIAA publication on long-term care listed a broad array of additional services which could be considered long-term care. These included homemaker services, chore services, social services and housing services. Few, if any, of these non-health related services are currently included in insurance products.

Most companies offer a choice of deductible periods such as 0, 20 or 100 days. A deductible makes the coverage more affordable and, in theory, coordinates somewhat with Medicare. In reality, qualifying for nursing home benefits under Medicare is difficult because care must be given in a skilled care facility approved by Medicare and the care must lead to a restoration of health. The average length of stay reimbursed by Medicare is only 28 days.

Nearly all policies have a pre-existing condition provision from three to 12 months. This provision is a very important tool to protect against anti-selection. The length of the pre-existing condition provision will be influenced by marketing considerations as well as degree of underwriting. Other exclusions vary greatly but usually include war, self-inflicted injuries, stays for which no charge is made, and mental illness. Alzheimer's disease and other organically based mental conditions are typically covered if they are not pre-existing conditions.

Renewability of the policy is a major issue. Some companies sell guaranteed renewable coverage. Other companies sell conditionally renewable coverage on the grounds that the coverage is too experimental. The opponents of conditionally renewable coverage in this market argue that it would be socially wrong to

cancel coverage on elderly people who probably have become uninsurable. In addition, initial loss ratios should be low, but the active life reserve buildup will be very large. The distribution of this reserve upon cancellation has been a great concern.

Anticipated minimum lifetime required loss ratios vary from 50% to 65% depending on state and policy renewability. Requirements that nursing home policies have the same loss ratio requirements as Medicare Supplement policies fail to recognize the extreme differences in claim frequency, severity rates, and the experimental nature of long-term care insurance. High loss ratio requirements make it difficult to provide adequate margins for expenses, profit and contingencies. Long-term care policies involve a higher degree of selling effort than other types of health insurance.

The first-year expected loss ratio will most likely be less than 20%, increasing thereafter by 15% to 20% a year. The claim cost curve for nursing home coverage is likely to be one of the steepest encountered by most actuaries. It is extremely important to alert management to this loss ratio pattern so that early profits are not overstated and underwriting standards lowered. The pattern of expected claim costs also makes the interest and termination assumptions extremely important in the calculation of lifetime loss ratios and GAAP benefit reserves.

Issue age limits for nursing care coverage generally run from a minimum age of 55 or 60 to a maximum age of 79. A few companies will issue up through age 84. The product seems to have limited appeal below age 65, perhaps due to the difficulty of younger people seeing the need. Due to the steep claim cost curve, the nursing home product becomes very expensive with advancing age. One of the shortcomings of nursing home insurance is that because of the extremely low utilization rate, healthier individuals may lapse coverage if they decide that they will never collect under their policies. Perhaps some accumulation vehicle with cash values would better serve this market, although current regulation would not permit such a product. Alternatively, nursing facility benefits could be packaged with more frequently used services so that the insured has the perception of getting something for his money.

I am aware of only one company selling a nursing home policy on a step-rated basis. This approach would seem to encourage lapse and anti-selection every time the premium increases. The sharp claim cost curve would also suggest rating for the individuals over age 69. The majority of companies have only one underwriting class for the product. Greater equity would be achieved by charging substandard extra premiums, but lack of data and practicalities of the distribution method may dictate otherwise. On the other hand, failure to establish distinct rating groups may lead to a deterioration of risks insured if other companies are able to attract the better risks.

Most of the business currently in force has been generated through the general agency system. Recently, some career agency companies have released products, and a few companies are experimenting with direct marketing. The difficulties with direct marketing this product are educating the consumer about the need for the product and the relatively large premium involved. The primary problems with using general agents are the lack of uniform training and the possible lack of commitment to quality field underwriting.

The type of underwriting ranges from a few companies that are experimenting with guaranteed issue to comprehensive underwriting involving a detailed medical history and mandatory attending physician's statement. The importance of quality underwriting cannot be stressed enough. The Marketing Department should not be permitted to routinely second-guess the underwriters. The large potential benefits and low claim frequency create a situation where anti-selection is likely. Persons in the early stages of Alzheimer's disease may be expected to complete their applications less than honestly. In some cases, persons other than the proposed insured may answer the questions and sign the application. Cases of agent abuse should be dealt with strictly. It is interesting to note that most companies require medical exams on life insurance applications for amounts of as little as $10,000 at these older ages.

Due to the nature of the risk, some type of social underwriting could be appropriate, subject to regulatory constraints. Social underwriting would include observations about the individual's apparent ability to care for himself and his living quarters, and an inquiry about the proximity of family and friends who could provide care.

Claim handling should be most difficult for contracts with different benefits for the various levels of care. The most critical time is before the claim is approved for initial payment. The claim examiners should assure themselves that the claim is not due to a pre-existing condition or that the policy should not be rescinded due to misrepresentation on the application. The incontestable period should be as long as permitted to provide further safeguard against dishonest applicants and agents. The claim examiners should routinely verify age, height and weight. A consulting doctor or nurse familiar with nursing home practices could help evaluate levels of care.

The Claim Department should maintain good communication with the Underwriting Department so that areas of underwriting weakness can be identified and corrected early. The underwriters would benefit from reviewing claim files periodically. The Claim Department should also alert management to policy language problems as soon as possible. A possible cost containment device would be to require a third-party review in advance of the need for the nursing care confinement. Medical need for continuing confinements should be verified periodically.

Pricing the product is difficult because virtually no relevant data has been published. Some governmental statistics are available, but this data does not reflect an insured population and may reflect stricter eligibility requirements. To the extent that financial considerations postpone non-insured nursing home confinements, experience with an insured population will be significantly worse, especially if proper underwriting standards are not enforced.

Initial pricing data is hard to come by, and the actual claim experience emerges very slowly. The initial claim frequency will probably be less than 1%. Very likely, a relatively high proportion of claims terminate within the first six months. The problem is estimating the run-out pattern of the remaining claims. Claims that have been open at least 18 months almost certainly will reach maximum claim status unless the claimant dies first. Setting proper claim reserves for claims open less than one year can be quite challenging. Initially, it would be appropriate to assume a claim continuation pattern consistent with pricing assumptions, but the actual pattern should be discerned

as soon as possible. Inclusion of nursing home claims with those of products having a relatively rapid run-off, such as hospital indemnity, will produce grossly deficient claim reserves. Inadequate claim reserves will not only distort financial statements but will possibly mask the necessity for rate increases.

Several states, including Iowa, North Dakota and Wisconsin, currently have special regulations pertaining to nursing care coverage. Other states, including Minnesota and New Jersey, have legislation pending. Such special legislation involves mandated policy language, benefits, and loss ratio requirements. In addition, there is an NAIC advisory committee on long-term care that should be releasing a report in June of this year. This report will consist of the following six sections:

1. An inventory of available data;

2. A proposed consumer guide to nursing care insurance (to be distributed by the insurance departments);

3. A discussion of the need for a model bill;

4. A discussion of legislative and regulatory constraints that may impede product development;

5. A review of alternative funding mechanisms for long-term care (such as home equity conversions, annuities and expansion of Medicare); and

6. A discussion of tax incentives to encourage the sale and purchase of long-term care products.

Long-term care represents a virtually untapped market. A 1985 ACLI survey (reported in Data Track No. 15) found that 72% of respondents feel that it is very important for the elderly to have health insurance for a nursing home or home health care. Also, 78% of the respondents with full-time employment would be willing to share the cost of long-term care insurance with their employer.

There are many pitfalls for the unwary which may explain why so many companies have, until now, avoided this product. Before entering this market, companies should be committed to allocating sufficient resources to stay on top of it. Long-term care is not a product to be handled in your spare time. With proper product design, underwriting, claim handling, reserving and experience monitoring, the product should be profitable.

MR. GEORGE C. ORROS: The concept of Lifecare is relatively new in the United Kingdom. There is, however, considerable interest in Lifecare and its implications on the care of the elderly.

I must first summarize the characteristics of the housing market for the elderly in the United Kingdom.

Anyone aged 60 or over today was almost certainly born into privately rented accommodation. At the end of the First World War, 90% of houses were privately rented. Only 8% were owner-occupied and local authorities owned 2% of the housing stock.

Over the years, the privately rented sector has been replaced by local authority-owned rented accommodation and by owner-occupied dwellings. By 1950, 29% of houses were owner-occupied, 18% were rented from local authorities and 53% were privately rented.

Since the Second World War, further developments in housing have taken place which have reduced the importance of the privately rented sector and improved housing conditions for the elderly. The immediate post-war government operated a controlled major building program which ran to 1954, after which there was a sharp drop in local authority building in preference for building for home ownership.

Table 1 shows that the distribution of housing stock over the last decade has continued to move towards owner occupation.

TABLE 1

UK HOUSING STOCK

	1918 %	*1950* %	*1974* %	*1984* %
Owner-occupied	8	29	53	61
Rented (local authority)	2	18	31	28
Rented privately	90	53	16	11
	100	100	100	100

The number of households with at least one person of retirement age was last measured in the 1981 Census. Fifty-one percent of these households were found to be owner-occupied, some of which will have been owned by the children of the elderly. In households where there were two or more persons of retirement age, an even higher proportion (56%) were owner-occupied.

The principal variation in home ownership among the elderly is probably their socio-economic grouping.

Table 2 shows a range of 30% to 85% in owner occupation. It is hardly surprising that the proportion in owner-occupied households decreases as one moves from the professional and managerial retirees to the unskilled manual retirees.

TABLE 2

UK RETIRED POPULATION

	Socio-economic Class			
	AB	*C1*	*C2*	*DE*
	%	%	%	%
Owner-occupied	85	65	44	30
Rented (local authority)	6	17	40	48
Rented privately	9	18	16	22
	100	100	100	100

Another important determinant of home ownership is family status.

Table 3 shows marked variations between single, widowed and married retired persons.

TABLE 3

UK RETIRED POPULATION

	Single %	*Widowed* %	*Married* %
Owner-occupied	31	45	51
Rented (local authority)	31	36	35
Rented privately	38	19	14
	100	100	100

The home ownership patterns of the single and widowed elderly are of particular interest to Lifecare organizations. The 1981 Census indicated that between 34% and 43% of the single and widowed elderly were still living by themselves in their own homes. It is interesting to note that the preference for owner occupation among lone householders aged 75 or over does not appear to depend on whether they are male or female.

A recent survey of home owners aged 60 or over has revealed that the majority of elderly home owners consider their present homes to be unsuitable for their retirement.

The major reasons given for the unsuitability of their homes for retirement were that their houses and gardens (yards) were too large. Existing health and disability problems did not appear to rank high in determining the unsuitability of their homes for retirement.

There is clearly a large potential market in the United Kingdom for Lifecare concepts.

How can we as actuaries and other interested parties assist in the development of these Lifecare concepts? Our major contribution will be in the development and implementation of practical projection models for Lifecare concepts and products.

The objective of one such Lifecare model, with which I have been associated, was to produce a flexible wide-ranging model which could be used to carry out feasibility studies on Lifecare project proposals.

LIFE CARE/LONG-TERM CARE -- ACTUARIAL CONCERNS

A practical Lifecare projection model needs to allow for a wide range of assumptions, many of which will be specified by non-actuaries.

The economic assumptions will include interest rates, inflation rates and risk discount rates.

The assumptions on capital expenses and operating expenses will be specific to the project under consideration. There can be some debate regarding the amortization periods and likely future operating costs.

The occupancy assumptions can be subdivided by:

1. Dwelling unit type distribution
2. Occupancy by unit type
3. Single and double occupancy
4. Nursing care in dwelling unit
5. Transfers to nursing unit

The actuarial assumptions will be based on past experience and on actuarial judgment and in addition to mortality rates will include nursing care rates in dwelling units, the health status of new entrants and temporary and permanent transfer rates to nursing units. There is considerably more experience data available in the U.S.A. than in the U.K. My own approach has been to try and blend U.S.A. and U.K. data, and then to use some commercial judgment. The importance of monitoring the actual against the expected experience cannot be overstated.

The potential role of actuaries in Lifecare communities can be summarized as follows:

1. The financial underwriting of new entrants. In other words, do the new entrants have the financial resources to join and stay within the Lifecare community for the rest of their lives?

2. Pricing models for entry fees and monthly fees. These may depend on both the entry ages and the attained ages of each of the participants.

3. Annual valuations of assets and liabilities. We need to be able to demonstrate the solvency of Lifecare communities.

4. Cash flow projections and financial forecasts. These can be for a time period of one, three, five, ten or even twenty years, depending on the business purpose under consideration.

5. Business Plans. These can be short term, medium term or long term.

6. Business monitoring systems. We need to be able to measure actual results and expected results, and to take corrective remedial action where appropriate.

The business planning assumptions will include the capital amortization period, the operating expenses projection period, the entry and monthly fee philosophy and can result in substantial financial creativity. Of particular relevance will be the extent of any financial guarantees and any promises made to new entrants. For example, to what extent should one trade off monthly fees against entry fees? Furthermore, who will subsidize the residents who can no longer afford to pay the increasing monthly fees?

The overall Lifecare model should provide an integrated framework within which the important issues can be considered and resolved. One of the most important issues will be the monitoring of experience. One should assume from the start that all of the model assumptions will prove to be wrong, to a greater or lesser extent. The task is then to prove the assumptions wrong as rapidly as possible, in order that one can then try and take the appropriate remedial action.

In regards to the current market opportunities in the U.K., these numbers are substantial:

- 10 million retired persons
- 3.2 million retired households
- 12% potential for sheltered housing

It has recently been forecast that there is a market potential of at least 400,000 sheltered homes.

The U.K. market for comprehensive Lifecare products is currently unproven. I expect that several players will enter the market over the next decade, irrespective of any actuarial involvement. We as actuaries need to develop our expertise in this field in order to assist these market entrants in developing their products and ensuring their financial soundness.

MS. BARBARA L. SNYDER: Continuing Care Retirement Communities (CCRCs) are becoming an important issue as individuals from many areas recognize the need, and increasing popularity, of this potentially effective means of providing for a growing sector of the United States's population. Some of the involved parties include the government, investors, management, accountants and auditors, retired people and organizations representing the retired community. There is also growing recognition that financial planning and management requires application of sound actuarial principles.

There are several areas of responsibility which the members of the Academy Committee on Continuing Care Retirement Communities are attempting to address. First, the committee considered whether the Academy should develop standards of practice for actuarial consideration of CCRCs. In fact, it decided that this was an important area of immediate concern and it has submitted to the Academy's Interim Actuarial Standards Board a draft of a Statement of Actuarial Standards for CCRCs. Secondly, it discussed accounting issues with the AICPA and others. The Committee is in contact with the subdivisions of the AICPA and the Healthcare Financial Management Association (HFMA) which specifically identify and define accounting principles applicable to CCRCs. A third charge was to develop a strategy for communicating with governmental entities that will, in all probability, be regulating CCRCs. The Committee's fourth purpose was to establish communication with the CCRC community, especially through organizations such as the American Association of Homes for the Aging (AAHA) and the American Association of Retired People (AARP). These last two goals are being actively pursued at this time.

In general, a CCRC is an entity which agrees by contract to provide stated services including living quarters and access to a nursing home bed, if needed, to an individual resident or pair of joint residents. Normally, other services are included in the contract such as one or more daily meals, laundry and social activities. The contracts are of long duration, frequently for the life of the individual or survivor of the joint residents. In return for such services, each resident or couple agrees to pay an entrance fee or a periodic fee throughout the period of residency or, most commonly, both.

A contract with a particular CCRC may vary as to its provisions on the scope of residential or health care services promised, and the regular or additional payments required for services.

As an actuary, you may be engaged to perform a variety of tasks for a proposed or existing CCRC. These tasks could include preparing a schedule of fees, participating in financial planning and accounting, preparing a cash flow projection or estimating the number of beds which may be needed at a level of care at any particular time. A comprehensive actuarial study involves all of the above.

There are two approaches to actuarial-based financial management for CCRCs. The "comprehensive" approach requires the total operation to be included in the actuarial equation. Under the second approach, which is referred to as the "unbundled" approach, the actuary furnishes actuarial input to management to be incorporated into the total financial planning.

Both approaches depend on the use of appropriate assumptions and methods and on the availability and use of other accurate non-actuarial information.

Under the "comprehensive" approach, there are two basic principles which can be summarized as follows:

1. The rate structure for new residents may be deemed adequate if the sum of the entrance fee paid at or before occupancy plus the present value of periodic fees is not less than the present value at occupancy of the cost of meeting all obligations assumed by the CCRC under the contract.

2. The financial condition of the CCRC may be considered to be in balance at a given date if its resources at that date are not less than the present value of the expected costs of meeting all its obligations.

The actuary is involved in computing balance sheet items which involve assumptions as to mortality, morbidity and the time value of money, including the present value of future periodic fees, the present value of the costs of providing future services and the present value of any refundable entrance fees.

The actuary should also be concerned with the valuation of invested securities, debt, fixed asset, and any potential transfer of economic resources which may take place.

The "unbundled" approach comes into play in situations where an actuary is asked to prepare input for selected balance sheet items without addressing the whole picture. In this situation, an actuary cannot express a professional opinion about the rate structure or the financial condition of the CCRC as a whole.

Under the "unbundled" approach, the actuarial pieces of the rate structure of the CCRC may be considered adequate if the sum of the current periodic fees and the current amortization of nonrefundable entry fees is not less than the current non-actuarial expense. This expense has been adjusted by substituting an actuarially computed level health care premium in place of the health care disbursements expected for the current period.

Further, the actuarial components of the balance sheet may be deemed in balance at the given date if the non-actuarial assets are not less than its non-actuarial liabilities (including unamortized and unrefunded entry fees) plus the liability for future health care.

Under the "unbundled" approach, the only opinion that can be expressed by the actuary deals with the liability for health care at any given time, the level of entry fee amortization, the level of health care funding, and the amount of unamortized and unrefunded entry fees.

It is obvious from the foregoing descriptions that actuarial projections require many assumptions. These assumptions include mortality, morbidity, withdrawal, interest, inflation, expenses, increases in periodic fees, and other factors which affect economic resources. As in all our work and as reflected in the Academy Committee on Guides to Professional Conduct, the actuary should use professional judgment in the selection of the appropriate assumptions for use in such projections. In particular, these assumptions should attempt to reflect actual experience, recognizing three considerations:

1. Over-conservative assumptions can cause the current generation of residents to subsidize later residents through redundant fees;

2. Over-liberal assumptions will result in future generations of residents subsidizing the current generation;

3. Resident agreements usually provide that periodic fees can be increased from time to time.

Of course, for existing communities, it is always desirable to take into account the actual experience of that specific CCRC. For new, or newly forming communities, the actuary will need to draw on other sources of reasonably comparable experience.

The work which an actuary performs for a CCRC naturally gives rise to relationships between the community, the public and other professionals concerned with the financial statements. In general, all actuarial communications, including statements of actuarial opinion and review and actuarial reports, are subject to Academy Interpretative Opinion 3. It is also recommended that an actuary who signs a statement of actuarial review for public use must be free of material, financial or organizational relationship with any person whose work is being judged or with that person's employer, client or other affiliate. That is, the actuary should be working under a framework of independence. Other actuarial work may not require such independence, but actuarial communications related to such work should disclose a relationship which is not otherwise apparent.

Actuarial reports arising from an actuarial study should be provided to the appropriate parties with full disclosure as to assumptions and methods, and with a statement as to whether provision has been properly made for all actuarial liabilities and related statement items. If the actuary has an adverse or qualified opinion, or if the actuary is unable to form an opinion at all, the actuarial report should specifically state the reason.

Finally, it is recommended that an actuarial report should disclose any concerns or doubts as to the CCRCs continuing ability to remain a going concern, to address a user's consideration of any limitation on the residency agreement, or to allow a prospective resident to have information to decide whether to sign a residency agreement.

The actuary dealing with CCRCs has a great deal of responsibility and duty to deal with the many complex issues with knowledge and professional judgment. It is a difficult area which can be seen from this very brief discussion of some points. I want to emphasize that this is only a brief outline and does not fully describe the many considerations which an actuary must take into account in working with CCRCs. With proper planning, which includes regular comprehensive actuarial valuations, horror stories on financial failures of CCRCs can be avoided.

MR. DAVID V. AXENE: Actuarial work for CCRCs requires the melding of disciplines much more than any other actuarial problem. Pension funding principles can be melded with life and health principles.

Long range forecasting projections, profit studies and asset share calculations used by the life actuary bear close resemblance to CCRC tasks. HMO work and future health care cost projections, in which many health actuaries are involved, contain elements that are necessary in CCRC development work. It is clearly something that crosses all disciplines.

About a year ago, the American Academy of Actuaries decided to form a committee to take a look at CCRCs because it too felt that there was a significant problem and actuaries were not being involved. An article in *Money* magazine a few months or a year ago talked about these elderly people who went in with all

this promise that $100,000 or $50,000 would be adequate, and a few years later there was no more money left. A few years later, the guy went bankrupt. They are stuck with the apartment they are living in, and there is no one to take care of their day-to-day needs. Unfortunately, there were several of these disasters that occurred and many of them were organized by financial charlatans who were out there to take advantage of the elderly. The real problem was that the financial people did not know how to report financial earnings accurately. They released too much of the entrance fee revenue too soon. As a result, there was not any money left at the very end.

Jon talked a little earlier about the steepness of the age/sex curve of long-term care products. This same long-term care age/sex curve is in CCRCs. It is essentially the same risk except that the CCRC is providing a guarantee to these people for a fixed fee. There will be very little utilization at the very beginning -- the nursing home is empty. In a few years, maybe as many as ten or twelve years, the CCRC gradually matures and starts to stabilize. At that point in time, funds may be insufficient for the guarantees made. Financial disaster results.

This was the basis of the Academy's concern. The four charges given were described in Barbara's remarks. Last Friday, the Committee presented to the Interim Actuarial Standards Board a set of actuarial standards. If the Board approves it, the Standards will be released to the members of the Academy so that actuaries in the industry can respond.

One of the areas that is very confusing is the legislative area. Al Powell, an A.S.A. independently consulting in the CCRC Community, has been assigned the responsibility of keeping track of the legislative developments for the Committee. The Committee is trying to establish a contact in every state. Currently, it has people assigned to about a one-third of the states.

A current problem in CCRC development is that much of the industry does not want to use actuaries. The industry says "We can make it on our own, we don't need your input." When you come in with the concept of the "comprehensive" approach, the industry is concerned about the magnitude of the charges associated with that kind of approach.

LIFE CARE/LONG-TERM CARE -- ACTUARIAL CONCERNS

Being a health actuary working primarily in the managed health care area, I found CCRC work rather interesting because I was doing things I was not used to doing. For example, I was looking at a mortgage on a building and calculating the actuarial value of a series of payments, or looking at fixed equipment costs and depreciation. These are issues that you do not think about unless you have gone through it very carefully. CCRCs have very complex issues. Unless you have an economic background, or other training, it is difficult to really get a handle on some of these things.

The balance sheet includes many aspects that are actuarially generated. Many insurance companies will admit that the IBNR liability on Exhibit 11 in a traditional statutory blank is an actuarial exercise. They might even say that Exhibit 8, the life insurance reserves, is an actuarial exercise. Actuaries are having difficulty convincing the CCRC Community that the present value of future costs is an actuarial exercise. They think it is an accounting exercise. Often the actuary is fighting a losing battle when trying to get recognition. If you like trying to prove that you are not the underdog in the situation, becoming an actuary is a great field to get into. You clearly have three strikes against you and you are trying to prove to the CCRC Community you are not out.

Actuarial projections are an essential part of this work. You need pension-type population projections. You need to project future health care costs. You need to know the most sophisticated life contingency methods. This requires a triple-headed monster: an actuary that knows all three disciplines, something that is very difficult to find.

There are some general things I would like to describe about CCRCs that will add some further insight:

Insurance Industry Involvement: There are a few companies that have an assumption of this long-term health care risk which is very similar to the insurance policy that Jon's company sells. These companies are marketing a product to CCRCs to assume that risk. This is something that has interesting implications because many of the CCRCs figure they can get rid of the actuary once they use

the insurance company. This is another area that could have both a good and a bad side to it.

Most actuaries believe it requires more than 200 lives to have a credible group for group life insurance. These communities probably have 200 apartments and you are trying to develop experience adjusted mortality projections based upon 200 people. This means risk reserves are required to absorb fluctuation in year-to-year claims experience. Small group life insurance knowledge is very helpful in this type of product.

There are some plans that are "for profit." There are some communities that are "not for profit." Most recently the "for profits" are getting into this market. The Marriott Hotel chain has recently entered into this market. There are national organizations like Life Care Services that are extensively involved. Many hospital chains are getting into this market.

Underwriting Selection: Assume a $10 or $20 million facility has been built. If you do not start selling these CCRC contracts you will go bankrupt. There is a tremendous temptation to let anybody in when you are short on funds. This significantly affects the mortality projections. Underwriting selection becomes a significant issue. The rich elderly are frequently the ones attracted to these facilities; frequently they have better than normal health status. Financial underwriting is critical. If residents can not pay, who will?

Frequently we have a stereotype of a nursing home resident: one who can not take care of himself which is why he is there. People entertaining CCRCs do not fit that stereotype. They are very independent people who want to take care of themselves, but at a point in time when they can not, they want an out. Most of these facilities are very nice, clean places where you would like to live. They are very up to date, but what are they going to be like 40 years from now? Are they still going to be up to date? There is an issue of future replacement costs.

The refundability of entrance fees is also a big issue. It is like the cash value problem on a life insurance policy. Some contracts that are issued will return 90% of the entrance fee no matter when you leave. If CCRCs spent some

of that money, they have to charge a little extra to have enough to pay it back. This becomes a very complex actuarial calculation.

The spread between medical inflation and the interest rate is a significant issue in medical evaluations. Pension actuaries have had this problem for years with the salary scale and the interest assumption. This is clearly an issue actuaries need to look at.

Right now, there is a lack of sophistication in the actuarial methodologies. Not much has been written of the subject. There are a lot of issues in this area where the actuarial mathematics have not been accurately and reasonably developed.

MR. PETER HUTZEL: Are most of these CCRCs, in a financial sense, really an insurance company?

MR. AXENE: Yes. CCRCs deliver a service instead of a payment but they are really an insurance company.

MR. HUTZEL: Is the NAIC taking any action on regulating this area? It seems this is where the action should start.

MR. AXENE: It is the opinion of the American Academy of Actuaries Committee on CCRCs that the NAIC is the worst place to start. First of all, today we have GAAP accounting and we have statutory accounting. Statutory accounting is something to prevent insolvency. The most important thing on CCRCs is to have financial statements that reproduce reality. The Committee is concerned that the NAIC might get too involved. It would like the industry to regulate and police itself as much as possible, in an appropriate way so that problems will be avoided. But, you are right. Many of the insurance departments are not getting involved; some are even threatening to establish '58 CSO reserves on CCRCs which are not a good representation of an annuitant-type population.

MR. HENRY ESSERT: Just to put the numbers in perspective, do you have any figures on how many people are currently in these CCRCs?

MR. AXENE: The latest information that I have seen suggests that there are between four and five hundred communities in the United States at this time. Each of those communities include somewhere around 200 to 250 residents. Now, there are long range projections that say approximately 5% of the aged could, and probably will, live in this kind of environment in the future. Five percent of about 10% of 250 million is a lot of people! Divide that by 200 residents and that is a lot of homes.

MS. BARBARA J. LAUTZENHEISER: How many states have proposed, or are proposing, legislation on CCRCs?

MR. AXENE: Approximately 50%. I would say there are about fifteen active states and there are several, including the state of New York, right now that are really intensively going after legislation.

MS. LAUTZENHEISER: And how fast would you say we have to move in order to be able to, as actuaries, help affect that legislation?

MR. AXENE: Yesterday. Right now, in the state of Washington, they are working on legislation and are moving very quickly, down the wrong road. The State of Massachusetts is on the verge of signing something within the next few months.

MS. LAUTZENHEISER: The first time I grew concerned about this subject was during my time as Chief Actuary at the Bankers of Nebraska, and one of these communities was beginning in Lincoln, Nebraska. That was about 15 years ago and we paid absolutely no attention to it. My concern is that we do not pay attention to such things in the beginning, but then put up a fight after having three strikes against us. I think we ought to look around and find more of these issues to become involved in now.

MR. AXENE: Yes, when you figure that approximately 10% of our population is subject to the intense marketing associated with CCRCs, and many of them have adverse effects, it is a problem.

MR. CHARLES L. TROWBRIDGE: We have been talking about the type of CCRC that operates on what I call the "life-lease" basis. In other words, it does

have a lump sum at the beginning and it also has monthly fees. Certainly that is one type of CCRC. But, let us broaden the concept to the two extremes. The type we have discussed is right in the middle between two other approaches, straight rental and straight ownership.

The straight rental, or retirement home, is all over the place and is often government supported. The ones that are HUD sponsored and are for low income people, are straight rental property. Now look at the other extreme: the phase that is essentially a condominium -- the person buys his own property. He still will have a monthly fee for some of the services that go with the condominium, but a life care community that runs on a straight condominium basis is in existence too. Quite a few people live in these and hardly even know it. Condominiums that are especially for older people are a third phase.

So, at least we have those three kinds of ownership, and they are all in the same field. There is misconception by the American public as to what they are buying. The general idea that CCRCs do take care of you for life, which comes from some of the older CCRCs, just is not so anymore. Hardly any CCRC can really guarantee that it will take care of you for life because of the tremendous cost of the nursing home phase. So the guarantees that people half way expect are not there. The people that go into these homes are near 75 years old and they cannot be expected to really understand what they are buying. So many times there is a real misunderstanding between the seller and the buyer, which is unfortunate. CCRCs are in competition with each other. They all have fancy looking brochures. They all put their best foot forward. In fact, they put it so far forward that not all they say is true. The problem of misrepresentation is very large. There is a lot of feeling in the industry that this is one of CCRCs major problems.