
**ACTUARIAL ASPECTS OF
CONTINUING CARE RETIREMENT COMMUNITIES**
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I've been asked to summarize the state of the art, as I know it, in the application of actuarial science to continuing care retirement communities (CCRCs).

CCRCs

CCRCs provide residential, social and health services to people of retirement age -- who move there, typically in their mid-seventies, to stay for the rest of their lives. The residents start out living independently, often driving their own cars, travelling, and participating in the activities of the wider community as well as of the CCRC itself. Those who live to a ripe old age usually end up less independent, but surrounded by friends. The objective is a stimulating living arrangement, independent of one's children, with sufficient support services so that the healthy can retain relatively independent lifestyles while the less healthy receive the care that is needed. This even gives added freedom within married couples, if one is bedridden and the other is healthy.

Payment for residence in a CCRC is made by a combination of a lump sum fee at entry and periodic fees for life.

Range of Promises

A CCRC's promises may be categorized as residential services (without any particular actuarial flavor), health services and financial risk sharing.

The health care promise can range from a minimum of guaranteed access, to a maximum of fully prepaid care within the basic fees. The health facility is usually located on the campus of the CCRC, and may offer more than one level of nursing care. Some of the health risk may be transferred by purchasing community-wide indemnity insurance.

The entry fee carries a refund promise that also varies. At the minimum, there is a declining refund for voluntary withdrawal in good health, during a stated trial period. This provision is generally included in all contracts. At the maximum there is also a full refund at death.

Entry Fee

CCRCs are expensive to operate, and depend on relatively full occupancy. The substantial entry fee is a way of securing the needed commitment to residency. It provides for the cost of any refund, but, more importantly, prepays a part of the cost of lifetime occupancy. It does not usually provide ownership. Where it relates to a pair of residents, occupancy continues and no refund is payable until the last of the two dies.

An entry fee that is refundable only during the trial period is, of course, less expensive than an entry fee that provides for a full refund at death. Prospective residents can

evaluate whether the fee difference, invested, is likely to produce a greater value than the death refund, in their own circumstances.

Periodic Fee

The periodic fee is payable throughout residency, and is intended to be level except for inflation. Where it includes prepaid health care it involves a reserve build-up in the early years to provide for the higher use of health care in the later years.

Choice of Actuarial Approaches

The standards of practice adopted in 1987 recognize two actuarial approaches to the financial management of a CCRC: the Comprehensive Approach and the Component Approach. Under both approaches, the actuarial factors that must be considered include mortality, morbidity, investment return, and several types of inflation: ordinary inflation applicable to the "rental" operation; health care cost inflation; and inflation in the types and amounts of health services, social services, and physical plant that are perceived as appropriate and necessary.

Comprehensive Approach

Under the Comprehensive Approach, all the cost elements of the community are incorporated into an actuarial balance sheet. The adequacy of the fee structure is tested in three steps.

The first step tests the periodic fees for existing residents. A closed-group balance sheet is prepared, including such items as physical plant value, liquid assets, receivables, obligations, present values of all future services and refunds, and present values of all future periodic fees. If the balance is positive, preferably with a margin for contingencies, the first test is met.

The second step tests the fees for new entrants. A balance sheet is prepared for a typical cohort, to test whether the entry fees together with the present value of future periodic fees are sufficient to provide for the present value of future services and refunds, preferably with a margin for contingencies.

The final step is a cash flow projection (for all residents) on an open-group basis, to test whether the liquid assets, including borrowed monies, and the projected future receipts and disbursements of the CCRC, can be expected to produce a positive cash balance at all times.

If these tests are met, the CCRC is in actuarial balance.

Component Approach

Under the Component Approach, the distinctly actuarial aspects are recognized as adjustments to the remaining finances of the CCRC. The actuarial aspects center on the health care costs and the entry fee. The health care fee, intended to be level (except for inflation), involves a reserve build-up in early years to help pay for higher use in later years. The entry fee involves a reserve to pay for the refund, and amortization

to pay toward the cost of lifetime occupancy.

The health care fee is added to the non-actuarial "rental" fee. The amortization of the entry fee reduces the periodic fee that would otherwise be needed.

Actuarially adjusted balance sheets, overall and for new entrants, and a cash flow projection, are also appropriate under this approach.

In General

The Comprehensive Approach is more straightforward in concept. The Component Approach provides a more convenient adjustment to non-actuarial financial analyses. Both approaches involve some interesting conceptual questions.

Under the Comprehensive Approach, how do depreciation, and reserves for plant maintenance and replacement, fit in with traditional actuarial values? Under the Component Approach, to what extent do health care reserves overlap with reserves for unamortized advance fees and for refunds?

CCRC contracts permit fee adjustments for emerging experience. Actuaries translate this into an assumption that periodic fees will be increased by the applicable composite rates of inflation; and the test for adequacy is on this basis. Some operators of CCRCs would go a quantum step farther, and argue that the right to adjust fees for future experience causes any fee structure to be adequate.

Population Flow Projections: Turnover, Health Care Beds

An additional actuarial guide in planning and operating a CCRC is the population flow projection, which is usually produced as an interim result of the basic work. This projection enables the planners to estimate the flow of living-unit vacancies that will be available for reoccupancy, and the number of health care beds that will be needed in the immediate and long-term future,

Experience Data

Experience data for CCRCs have not been widely collected and disseminated. Individual CCRCs have populations of several hundred. Different CCRCs have different characteristics. The experience of a specific CCRC needs to be combined with broader mortality and morbidity experience to produce useful factors. A CCRC should be tested periodically to adjust for emerging experience.

Interaction with Accountants, Operators and Regulators

The accountants are attempting to develop more realistic and informative reporting of CCRC operations. Their principle-setting bodies have recently invited actuarial input to their deliberations, and we actuaries are gratified at the opportunity for cooperation. While it appears the accountants will require actuarial content (from us) in their financial statements for CCRCs, there will still be some important differences between the two professions' reporting. These will have to be explained and evaluated in footnotes to their respective analyses. The differences usually involve

actuarial present values. At this writing, the accountants still express serious doubts about discounting for the time value of money.

The operators of CCRCs are moving toward an industry-wide acknowledgement of their need for actuarial input. They are joining with the actuaries and the accountants in trying to resolve their different viewpoints.

State regulators are endeavoring to develop standards of consumer protection and disclosure in the areas of pricing, marketing, contractual guarantees, administration and financial management of CCRCs. The regulators sometimes start out with a paucity of knowledge and an excess of preconceptions on the subject. The state insurance (or other) departments, to which the supervision of CCRCs is assigned, are often overworked already. The operators, actuaries and accountants are offering advice to the regulators, in the hope that the resulting standards can be relevant and efficient, contributing to the quality of CCRC arrangements, without burdening CCRCs and their residents with wasteful or misdirected requirements.