

An Introduction to the Service-integrated Innovative Pension Annuity Insurance

Abstract

With the ever deepening of China's aging population, the demand for high-quality life after retirement has increased in the group of aged people. Therefore, more and more financial companies are involved in the construction of Continuing Care Retirement Community(CCRC). In the past ten-year, insurance products and the CCRC have not been effectively integrated, resulting in the slow return of funds to the CCRC project and longer debt duration than expected. To explore an innovative model that closely integrates insurance products with CCRC, we design and develop "service-integrated innovative pension annuity" by optimizing actuarial skills and product rules. Based on the immediate-pension-annuity, our products, providing high standard services and financial guarantee, empower the policyholders to be able to make decisions in the settlement in CCRC. The innovation model of "CCRC + pension annuity" pave a new way for the exploration of pension annuity.

Keywords: service-integrated innovative pension annuity insurance, aging population, CCRC

Backgrounds

Population aging, initially occurred in developed countries, is the inevitable result of the development of economics and the improvement of the medical security system. According to the United Nations criteria, when the elderly population aged at 60 or above accounts for 10% of the total population, or the percentage of the population aged over 65 reaches 7%, the country enters the aging society.

According to the seventh national census in 2020, the proportion of Chinese population aged 60 and over is 18.7%, in which the population aged 65 or above

accounts for 13.5%. With the booming economy of China, it has been entering the era of the aging society.

With the continuous population aging, the demand from the elderly for exclusive pension insurance products and high-quality professional pension services has further been prompted. According to the "Retirement Planning and Healthcare of Chinese HNWI's 2017", 68% of the high net worth population are willing to pay extra for premium value-added services such as qualification of living in senior care communities.

However, in contrast to the young and middle-aged customers, who are accessible to abundant "CCRC + annuity insurance" products, the aged customers can only access fewer products with more restrictions. As of July 2021, based on the industry database of Personal Life Insurance Product Information from Insurance Association of China, there are the 7200 personal insurance products available in the market, among which 241 are of pension annuity insurances, causing the inequilibrium of supply and demand.

Product Design

1. Pattern Design

We create a closed-loop service of "insurance, medical care, and industry" by combining "pension insurance" and "senior community", providing better pension products and services for the senior. On the basis of the traditional immediate pension annuity only providing future pension, the option of living in the pension community is added.

Besides, we provide customers with two alternatives: customers can directly get cash back, or change beneficiaries to live in designated senior care communities to fulfill the one-stop senior care planning.

The service-integrated innovative pension annuity insurance model we have developed is as following:

- It is a whole life pension annuity.
- Annuity is monthly paid after the Cooling-off period.
- We give policyholders two types of guarantee payment period. If they insure before 81 years old, the guarantee payment period is 25 years. If they insure at 81 years old or above, the guarantee payment period is 20 years.
- Based on the annuity, we give the policyholder the added option of living in the community.

2.Product Pricing

2.1 Consideration of incidence rate

The pension annuity product is mainly faced with longevity risk and continuous pressure of future cash flow. Due to the limitation of the industry life table, we use HP (Heligman & Pollard) eight parameter model and Whittaker cubic spline smoothing to extrapolate and smooth the death rate of high age. Moreover, combined with the trend of future mortality improvement, the premium rate, and VoNB under different mortality improvement factors are tested. Based on the experience of the industry, the company's own experience and testing results, the incidence rate assumption of the product is carefully formulated.

2.2 Extend the issue age

The pension annuity products can be purchased after reaching the mandatory retirement age. Retirees could join the high-end retirement community by purchasing the product for a lifetime income stream. The maximum issue age can be up to 85 years old and the guarantee period is moderately reduced for the elderly to reduce the amount of premium and reduce the purchase pressure.

2.3 Longevity risk

For product pricing, the maximum age of the current life table that is capped at 105-year-old, will not be compatible to the prolonged life expectancy cases, since someone could live longer than that. Although comprehensive consideration and analysis are applied, the insufficient demographic data of those aged over 90, making increased volatility of mortality rates, may still bring the product model with certain longevity risks in the future.

3.Product Services Integration Model

3.1 Available for "Customer Direct Payment"

Customers can directly receive monthly-pension to settle the statement of housing fees and service charges. If they prefer to stay in the designated senior care community before the appointed date, not only will the right to settle be guaranteed, but the lifelong locked discount will be offered for housing usage, plus the multiple discounts for services.

3.2 Realize the "joint-life annuity insurance" feature.

For the spouses choosing to live together, if the insured dies, the spouse can still settle the housing and services charges directly via the "direct payment" option until the end of the guaranteed payment period. This feature helps customers to transfer longevity risks and to provide solid wealth protection for a quality retirement life.

Conclusion

Insurance products that are bundled with senior care services are the industry trend of future development. Most insurance companies prudently provide this model product due to the problems of large investment and long-term capital flow in the construction of the senior care community so that the demand for premium senior care services pursued by the senior is hardly satisfied.

Our article introduced the service-integrated innovative pension annuity insurance that sufficiently accomplished the synergistic effect consisting of the senior care

community and pension annuity products, through a combination of "medical and healthy care living industrial landscape".

On the one hand, this model provides premium senior care services by opening up business integration nodes. On the other hand, this model helps to attract more long-time customers to live in the community, thereby fundamentally increasing the sales rate and faster cash withdrawal so that a closed-loop of funds is formed. But to fundamentally solve the problem of capital flow in the assets-heavy model for the senior community, it is still necessary to improve the service quality by improving the senior community.

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