Annuity underwriting in the United Kingdom

1. Purpose

This note is for the International Actuarial Association Mortality Working Group (IAAMWG). It aims to provide an overview for an international audience, of the current position with the underwriting of annuities[1] in the UK. For more about the construction of enhanced and other annuities, I have included references in the Appendix. I have drawn on materials on the internet and from discussions with Hannover Life Re, Towers Watson, Swiss Re and others, and am grateful for the information which is not always attributed.

2. Background

The size of the annuity market in the UK is due in part to the pensions savings environment where there is a requirement to convert part of an individual's pension savings into a pension annuity. The ability to "shop round" for a better annuity (the "open market option") supports a competitive market in annuities. However, there is also an active immediate annuity market, a market for lifetime care annuities, and annuities are written for structured settlements.

Enhanced annuities[2] were developed around 1995 to enable higher annuity payments to be offered to clients with a lower-than-average expectation of life. The market has grown rapidly in recent years, with Association of British Insurers (ABI) figures showing the percentage of enhanced annuities rising from 7% in the first quarter 2008 to 17% of all annuities in the first quarter 2011. While this is still a relatively small percentage, Towers Watson estimate that 2010 enhanced annuity sales were near £2,500 million, and sales in the first half of 2011 were near £1,430 million. Also, the UK government has signalled its intention to amend domestic law to clarify the position on the use of gender as a risk factor in insurance, and this is likely to lead to a great interest in underwriting annuities based on other risk factors.

Annuity business is written by a number of insurers, but the more specialist substandard annuity market is dominated by a very small number of them. Competition is assisted in the UK by Independent Financial Advisers (IFAs) who can select from the offerings of any providers, and by systems that allow this to be done online through portals. A number of organisations that support people with particular disabilities provide access to annuity underwriting websites.

3. Underwriting types

While basic levels of underwriting may be used to protect the interests of the provider by maintaining higher rates to discourage the "best" lives, the main interest in this market is the provision of a higher income than a standard annuity, where the annuitant may exhibit a lifestyle, socio-demographic or medical factor that is expected to shorten his or her life expectancy.

[1] I have focused only on lifetime annuities, referred to here as "annuities"

[2] The term "Enhanced annuities" is used here in the wider sense of all annuities where the annual payment is at a higher level than standard, due to some feature of the client's health, lifestyle, etc.

Underwriters may take into account issues such as: serious illness, less serious conditions, behaviours such as smoking, and socio-economic factors such as postcode (zip code). These can be considered in conjunction with underwriting factors such as size of premium (large annuities tend to be associated with higher longevity) and, at present, gender. In addition, when underwriting for lifetime care annuities, the potential care needs of the specific client need to be taken into account.

The categories given below are intended to give an overview of the “types” of annuity, determined by the underwriting. Clearly there is considerable overlap and variation in definitions, and most authors and providers use a smaller number of groups. The first two categories can be seen as selecting between different groups of “normal” lives. The final three deal with different levels of reduced life expectancy. I have based the definitions in part on Gatzert et al – See appendix.

Postcode underwriting

Postcode annuity pricing is now used by some insurers as a rating factor. Postcode can be used as a proxy for social class, and life expectancy can vary significantly by both social class and geographical region. Also, this does not require the completion of a medical questionnaire. Each UK postcode covers a small number of properties and there is strong evidence from the analysis of pensions and life assurance business that links groups of postcodes with higher or lower levels of mortality.

Lifestyle underwriting

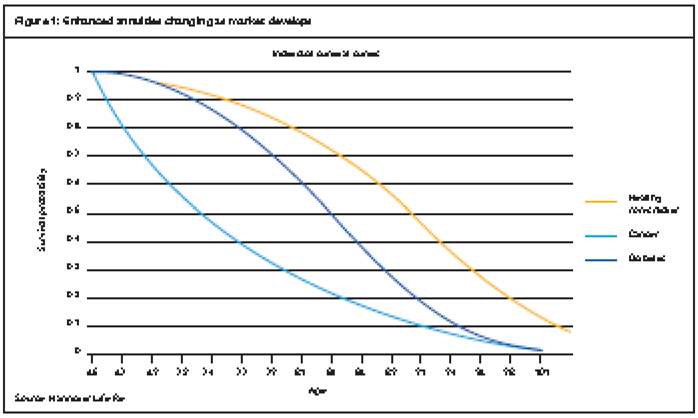
This can take into account smoking and drinking habits, marital status, occupation, height and weight, blood pressure and cholesterol levels.

Postcode and lifestyle underwriting provide an interesting contrast with the US market, where these factors are generally not used because they are deemed to be under the control of the client. Concerns about "over disclosure" (overstating smoking or drinking habits) do exist, but methods of post-underwriting such as the use of cotinine tests are used. It is also recognised that older people move house relatively rarely, and will usually move to a postcode with similar mortality characteristics.

Enhanced annuities

An “enhanced annuity” will pay out an increased income to a person with a slightly reduced life expectancy. Underwriting can take into account, in addition to the above, a history of medical conditions which might include a past episode of cancer, heart attack, or controlled type II diabetes.

The figure below, from Hannover life Re, looks at survival curves for those aged over 65 if suffering from cancer or diabetes, in comparison with the survival curve for a healthy non-smoker.



Impaired annuities

An "impaired annuity" will pay out a higher income than an enhanced annuity, as a result of medical conditions which significantly shorten the life expectancy of the annuitant. Underwriting considerations may include, for example, a history of heart attacks, heart surgery or angina, life-threatening cancers, organ diseases, strokes and diabetes, Parkinson's disease and Alzheimer's.

Care annuities

Care annuities are aimed at seriously impaired individuals normally between age 75 and 90 or persons who have started to incur long-term care costs. Risk assessment for care annuities is based on geriatric symptoms such as frailty or restricted mobility, which are measured, for example, in terms of activities of daily living (ADLs). Cognitive skills may also be taken into account.

More details of underwriting processes are given in Gatzert et al.

4. Sources of information

The primary source of information for underwriting this type of business is the "annuity Common Quotation Request Form" (http://www.commonquotation.co.uk/). The form was agreed by the major providers of annuities, and permits the client's details to be circulated to one, a selection, or even all of the providers. "The CQRF captures personal, pension and medical details. The medical section is relatively short, comprising 10 basic health questions plus a number of lifestyle-related questions. This is supported by supplementary questionnaires covering common severe diseases such as heart disease, cancer, diabetes and stroke.

Typically the applicant completes the relevant forms with the assistance of their IFA, who can then request quotes from all annuity providers. Today up to 95% of all enhanced and impaired life annuity applications are assessed on the basis of these questionnaires" (Dahlke).

Given the strong level of competition and the potential lost cost of seeking further information, there could be reluctance by the insurer to approach the applicant for a medical examination. Further information, when called for, can include cotinine tests and General Practitioner Reports (GPR's).Outsourced medical data collection and underwriting are available to providers from specialist medical companies and reassurers.

5. Portals

"There are a number of portals now that allow IFAs to access information on products and providers, request comparative quotes, and transact new business online. Some are free to use, while others charge providers. IFAs enter annuitants' information, compare quotes and can then decide whether to apply directly for an annuity or go through the normal CQRF process. Portals complement the advantages of the CQRF by allowing a quicker process, improved access to information and – assuming all questions are answered properly – greater accuracy.

The fact that some providers offer real-time quotes and others only indicative or standard rates can create difficulties in utilising the portals to their full potential. Around 85% of quotation requests include "don't know" responses and cannot, therefore, result in guaranteed quotations. In practice, IFAs often use portals to get a general indication and then revert to the normal paper-based CQRF application process. Less than 2% of enhanced annuities are thought to be written directly via portals" (Dahlke).

At least one on-line intermediary provides branded websites for employers, special interest groups and pension fund trustees to use for their clients.

6. Online underwriting

It is expected that the introduction of an online version of the CQRF, if it could be developed as an industry standard, would substantially increase the proportion of guaranteed quotations, and reassurers and providers are working on this.

7. Expert systems

Expert systems are now available to underwriters that take into account a wide variety of risk factors and come up with a recommended rate. At least one of these was developed and calibrated using the organisation's existing book of business. However, any expert system will be limited by the quality of its data input, and more effective systems of capturing data are needed.

8. Tele-interviewing

There is considerable interest in the market in the use of tele-interviewing. The facility is used in other areas of the life assurance industry, such as follow up for income protection claims. Tele-interviewing, conducted by paramedical staff in direct contact with the client, has a number of advantages. It could save IFA's the problem of asking sensitive personal questions, improve the quality of information by using specialist interviewers, reduce concerns about "over-disclosure" and finally, and importantly, facilitate accurate direct input to online systems with interactive features to allow "follow-up questions" about particular factors.

9. Measuring the impact on mortality experience

The level of detailed and computer-encoded underwriting evidence available to the major annuity providers and the small number of specialist "substandard" providers provides a valuable competitive advantage. When used to compare with the mortality experience from their book of business, it gives these organisations a continuing capability of measuring and tuning their underwriting models.

As substandard lives are encouraged to opt for enhanced annuities, it is clear that "standard" annuity rates must take into account the selection process, and cater for a group of lives that are selected by not being substandard.

10. Developments in the UK and elsewhere

"In 2010, enhanced annuities[3] sales represented around 12% of those consumers that bought annuities – the current range of medical conditions and lifestyle factors that can lead to enhancements suggests a greater proportion of retirees could benefit." (Towers Watson)

The low level of yields on government securities in the UK at this time makes annuity rates seem unattractive to many consumers. The government is drafting legislation to allow wealthier clients to avoid the "open market option". It is proposed that individuals with a secure pension income of £20,000 may use flexible drawdown to draw all their pension savings as income without any restriction. This could lead to some reduction in the market for annuities. On the other hand, if and when yields on government securities rise, annuity rates may seem more attractive again.

As mentioned above, the European Court has ruled that insurers can no longer consider gender when pricing insurance policies from 21 December 2012. The details of how this will be applied under UK law is not yet clear, but it is likely that price competition will lead to a greater use of underwritten annuities. The same phenomenon may be expected in other EU countries where gender is presently used in annuity pricing and where the ruling applies.

The past few years have seen a growing market in the UK for care annuities. A client who is expecting to require care (eg nursing care at home or in a retirement home) in the long-term may find it necessary to sell or mortgage their own property to buy a care annuity. However, growth in this market will not continue if the recent report of the Commission on Funding of Care and Support is implemented. It recommends inter alia that an individual's lifetime contributions towards their social care costs – which are currently potentially unlimited – should be capped, perhaps at £35.000. If the client faces a maximum expense of £35,000, they may well find other ways to pay that amount in the knowledge that the state will pay for their care after that.

A 2007 paper by Brown et al, "Issues in the Issuance of Enhanced Annuities" concludes that the U.S. and Canadian annuity marketplace could be doing more to provide "fair value" annuities to substandard risks. Without an appropriate private-sector reaction, it suggests consumers may respond by inviting government intervention.

Brian Ridsdale
IAA Mortality Working Group
26 August 2011

[3] The term "Enhanced annuities" is used here in the wider sense of all annuities where the annual payment is at a higher level than standard, due to some feature of the client's health, lifestyle, etc.

Appendix

Bibliography

1. Optimal Risk Classification and Underwriting Risk for Substandard Annuities: Nadine Gatzert, Gudrun Hoermann, Hato Schmeiser
   http://www.actuaries.org/Munich2009/papers/LIFE/Mon_11.00_LIFE_Hoermann_Products_Paper.pdf
2. Enhanced annuities in the UK: Christine Dahlke, Hannover Life Re
   http://www.hannoverlifere.co.uk/resources/hlr/hlr-uk/generic/hlr-uk-infocus/In_Focus_Issue_47.pdf
3. Swiss Re CRO briefing: emerging risks initiative - position paper, November 2010
   http://media.swissre.com/documents/CRObriefing_Longevity_Nov2010.pdf
4. Enhanced annuity sales reach £1.4 billion for the first half of 2011: Towers Watson
   http://www.towerswatson.com/united-kingdom/press/5283
5. Issues in the Issuance of Enhanced Annuities: Robert L. Brown* and Patricia L. Scahill†
   http://66.216.104.121/library/journals/actuarial-practice-forum/2007/october/apf-2007-10-brown-scahill.pdf