The Actuarial Profession

making financial sense of the future

Response to the Commission on Funding of Care and Support

February 2011

About the Actuarial Profession

The Institute and Faculty of Actuaries is the chartered professional body for actuaries in the United Kingdom. A rigorous examination system is supported by a programme of continuous professional development and a professional code of conduct supports high standards, reflecting the significant role of the Profession in society.

Actuaries' training is founded on mathematical and statistical techniques used in insurance, pension fund management and investment and then builds the management skills associated with the application of these techniques. The training includes the derivation and application of 'mortality tables' used to assess probabilities of death or survival. It also includes the financial mathematics of interest and risk associated with different investment vehicles – from simple deposits through to complex stock market derivatives.

Actuaries provide commercial, financial and prudential advice on the management of a business' assets and liabilities, especially where long term management and planning are critical to the success of any business venture. A majority of actuaries work for insurance companies or pension funds – either as their direct employees or in firms which undertake work on a consultancy basis – but they also advise individuals and offer comment on social and public interest issues. Members of the profession have a statutory role in the supervision of pension funds and life insurance companies as well as a statutory role to provide actuarial opinions for managing agents at Lloyd's.

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Commission on Funding of Care and Support

2 February 2011

dilnotevidence@dh.gsi.gov.uk

Dear Sir

Commission on Funding of Care and Support

Thank you for providing the Actuarial Profession with the opportunity to meet with representatives of the Commission on 25 January and then subsequently to submit our comments on this consultation. Our substantive comments are attached to this letter.

If you have any questions or would like to discuss any of these matters further, please do not hesitate to contact us as per details below.

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Yours faithfully

Sue Elliott
Chair, Health and Care Practice Executive Committee

The Commission on Funding of Care and Support – Call for Evidence

Submission on behalf of the Actuarial Profession

The representatives of the Actuarial Profession's Health and Care Practice Executive Committee (PEC) were pleased to meet with the representatives of the Commission to discuss the involvement of actuaries in issues relating to the funding of long term care needs. This written submission summarises, and where necessary expands on, that discussion.

Background to the Health and Care PEC

The Health and Care PEC is responsible for supporting and promoting high standards of actuarial practice for those members of the Actuarial Profession who work in, or have an interest in, all aspects of both public and private healthcare. This includes matters relating to care needs. The PEC provides expertise, co-ordinates development within the Profession, acts as a focal point for knowledge and commissions research. It promotes various education events for the members of the Profession including an annual conference at which speakers from a range of external organisations are invited to speak on various topics including long term care.

The Health and Care PEC membership includes actuaries from insurance, reinsurance, academic and consulting backgrounds. A number of the members have extensive experience working in overseas countries, particularly the United States and Canada.

The Health and Care PEC maintains strong links with, and works with, other organisations in the UK including the International Longevity Centre, the Joseph Rowntree Foundation and the Coalition for Better Care.

International involvement

The Health and Care PEC maintains regular contact with actuaries in other countries through involvement with the Health Section of the International Actuarial Association and their various global topic groups including long term care. In addition certain members of the PEC are also members of the Society of Actuaries in the US.

Insurance solutions to funding long term care

While the PEC is involved in social policy issues relating to long term care we have restricted our comments on the Call for Evidence to the actuarial implications of structuring and pricing of insurance products if they were to be part of the solution to the longer term funding of care needs in the UK. We have concentrated on this area because it is one of the core competencies of the Actuarial Profession and we are aware that there are certain concerns about the way in which insurance products might be designed and priced principally following the failure of the previous attempts to market products covering long term care needs in the UK.

Consequently our comments relate to the section 5, “Appraising the suggestions”, rather than addressing the specific Questions 1, 2, and 3 in the Call.

<u>Pricing and product design considerations</u>

The pricing of long term care insurance products relies on the same techniques that apply to any type of insurance product. When there is a lack of credible data from past experience of an insurance portfolio the starting point is to identify and obtain population data. For long term care products it is possible to obtain information from National Statistics as mentioned in the paper attached to this submission.

For long term care insurance products one key factor which is subject to statistical variation is the length of time policyholders stay in a particular state of claiming, typically defined in previous products as the period following failure of a specific number of activities of daily living. This can be modeled from past Health Survey of England investigations. Where the available statistics relate to periods in the past there would be discussions with a wide range of those involved in delivering care to assess whether there was any temporal trend that should be taken into account in the period from the base date of the data to the present time. While there is a subjective element to the views of different deliverers of care the aim would be to seek to have these discussions with a wide enough range of organisations in order to form a reasonable consensus view.

The other key factor is the incidence of claiming so typically in previous products the likelihood of starting to fail the requisite number of activities of daily living at each separate age. Again the same sources of information can be used and the same informed discussions held to assess any temporal trends.

The necessity to adjust population data to a likely experience for an insured population is well understood and is common to a number of different product types such as Income Protection insurance and Critical Illness insurance.

The extent to which population data needs to be adjusted depends strongly on the product design. At one extreme where there is universal coverage the experience is likely to be close to population experience although there may be a small adjustment necessary if there are exemptions and opt outs from full universality. At the other extreme with full discretion over whether to take out a policy the adjustment will be larger due to the incentive for those who may expect to be more likely to claim to take out policies and those less likely to claim to remain uninsured. This effect is seen in the difference between the experience of large company medical insurance and income protection schemes with compulsory entry against the experience of individual purchases which are fully discretionary.

The adjustments to population data would take into account the experience under other insurance products and also benchmarking against the relationship between long term care experience and population experience in other more mature overseas insurance markets.

The product design is also taken into account in considering any premium margins that need to be taken included for potential variation around the central assumptions. Where the underlying rates are variable in future, which is appropriate as the temporal trends in the main pricing factors can be material, a short period to the next review would require a lower margin than a longer period. The margin would be determined by creating scenarios of the different distributions of length in the particular care state and in the rate of incidence. This analysis would typically be performed by stochastic modeling.

The expected average period in each state of care need, and in the incidence by age, is significantly different by gender and this can present a difficulty in pricing. If there is a necessity to have unisex rates and there is discretion in taking out the insurance policies there is a risk of adverse selection because there are different impacts for males and females. If there is compulsory enrolment then the mix, by gender, of the population will stay stable and unisex pricing is appropriate, although it does mean that there is an implicit cross subsidy which is no different in principle to other insurance products which operate on a unisex rating basis.

The future costs of delivering care in a formal care setting will depend on a number of factors including the general inflation in care costs, which may differ significantly from general inflation measures, and by any reduction due to medical and technology improvements. Flexibility in product structures would be necessary to ensure that the impact of this uncertainty is borne appropriately by the policyholder, insurer and state.

<u>Underwriting considerations</u>

As mentioned under the section on pricing the degree of underwriting required will depend on the product design. With a universal, or near universal, coverage there would be few underwriting questions as these would mainly be to confirm the identity of the individual. With fully discretionary entry, and the possible adverse selection that this entails, there could be a more extensive set of underwriting questions and the potential requirement for additional premiums or the exclusion of individuals from insurance in order to keep premiums at levels that are attractive to potential policyholders. Life and general insurance underwriters are skilled in assessing the relative risks posed by individuals completing the application forms. While there is some scope for reducing the proportion who are offered cover at non standard, increased premium, terms this would result in a higher premiums for all policyholders in order to spread the cost of the higher risks across the whole insured group.

While mandatory entry reduces the need for detailed underwriting and individual premium terms it does also mean that the insurance company gathers less information which it could otherwise use, once it has gained enough claims experience, to look at such preventative measures as using predictive modeling to assess parts of the insured group which are more at risk of claiming early and consequently may benefit from early advice and assistance with preventative measures.

<u>Claims considerations</u>

The claims definition needs to be unambiguous (both at outset and in the future), capable of being understood by the policyholder and capable of objective review in case of dispute over the validity of a claim. Previous products used activity of daily living criteria for determining the trigger for claims payment (or a significant cognitive impairment). These claims triggers did broadly meet the requirement of being unambiguous and capable of objective review. There may however have been some lack of clarity in policyholders' understanding due to an impression that the policy provides benefit on needing care in a formal care setting.

The claims definition is an integral part of the policy design and could be different from the definitions previously used. This could be for example to relate more closely to benefits provided by the state however the criteria mentioned above would still need to be met.

It would also be possible to design insurance products that pay benefits both on the failure of a number of activities of daily living and on needing admittance to a formal care setting as long as the claims triggers for each of the two benefits meet the criteria.

The "tail risk"

We discussed the question of the insurance of the, so called, tail risk which is the risk that an individual's period of claim is disproportionately longer than the average; which could be, for example, all cases in excess of 6 years. Insurance companies and their reinsurers are accustomed to insuring the tail risk on a wide range of income protection insurance, liability insurance, commercial insurance and property and casualty insurance catastrophe risks. In all these product lines the insurance and reinsurance companies have very large portfolios of business so the cost of the risk in the tail of the claims risk is spread over a large base. Similar considerations apply to long term care insurance so that as long as any anti selection effect is small, so that the tail risk is due to statistical variation and not adverse selection, and the size of the portfolio sufficiently large then the tail risk is capable of being evaluated through the stochastic models or scenario testing and incorporated in the pricing.

The alternative of capping the insurance claims after a period in formal care and then the state being responsible for the remaining period would have the effect of reducing the premiums for the insurance policy to some extent, depending on the period covered by the insurance, although it reduces, but not eliminates, the incentive for the insurance company to look for preventative measures to try to reduce the length of period under claim.

Summary

The pricing of long term care insurance products presents the same issues as pricing other insurance products and the members of the Actuarial Profession are used to addressing these issues. If insurance products are a part of the longer term funding of future care needs then the pricing of such products can be developed. The development of a viable insurance market however depends critically on the design of products, the attractiveness to potential policyholders, the sales and marketing effort and the interaction with state provision.

As agreed in our meeting I attach a copy of the paper on pricing, *LTC - A Guide to product design and pricing*, to which I referred. We have a number of other papers on the Actuarial Profession website which we can provide if it would be helpful. In addition we can obtain papers from the Society of Actuaries in the US.

Should you require any further information then please contact Pauline Simpson, the Health and Care Practice Manager at pauline.simpson@actauries.org.uk