

EXAMINATION

6 October 2009 (pm)

Subject SA1 — Health and Care Specialist Applications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*
2. *You have 15 minutes before the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*
3. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
4. *Mark allocations are shown in brackets.*
5. *Attempt all four questions, beginning your answer to each question on a separate sheet.*
6. *Candidates should show calculations where this is appropriate.*

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.

- 1** You are the Actuarial Function Holder of a medium sized UK health and care insurer writing critical illness, income protection and private medical insurance business. It has been decided that the portfolio of in-force critical illness business will be transferred to another health and care insurer. An application has been made to the High Court for approval of an insurance business transfer scheme.

You are required to prepare a report as part of the submission to the High Court for approval.

Outline the information that you would include in your report. [23]

- 2** A UK health insurer is considering the development of a new policy condition within its current private medical insurance contract in the individual market. This policy condition will be added at the next renewal date on existing policies and would also be included in all new policies. In each case, there would be no medical underwriting.

The proposal is to reimburse in full the cost of medically approved drugs currently not provided by the National Health Service in some areas of the country as the drugs are too expensive or are only effective for some patients.

You are the pricing actuary in the product development team.

- (i) Discuss the research that has to be undertaken in order to price the risk for this policy condition. [5]
- (ii) Discuss the issues that might arise from the inclusion of this policy condition and how they might be mitigated. [14]

The product development team feels that the contract should be partially reinsured.

- (iii) Discuss the factors, other than those related to the cost of risk, to be considered by the reinsurer when offering terms. [4]

It has been suggested that this additional policy condition could form the basis for a stand alone contract with medical underwriting.

- (iv) Discuss the additional issues that might arise if this approach were adopted. [4]
- [Total 27]

- 3** (i) Outline the factors that may affect how a financial adviser chooses which income protection product to recommend. [4]

A health and care insurer currently writes a wide range of long term health and care business sold only through insurance intermediaries. The intermediaries are remunerated on a commission basis, with some earning more commission per policy than others.

- (ii) Suggest possible reasons why the insurer has decided to pay different rates of commission to different intermediaries. [6]

There are two types of commission available: initial commission, which is paid at the outset of a policy, and renewal commission, which is paid quarterly to the intermediary as long as the policy stays in-force. A combination of these types may also be paid.

The regulator would like to discourage the commission method of remunerating intermediaries, and would like them to move instead to a fee-based business model. Under this model, intermediaries would not receive commission for the business they provide to the insurer, but would directly charge their clients a fee. The fee charged could be an initial fee, paid by the client to the adviser around the time the policy is taken out, together with an annual maintenance fee, or just an annual maintenance fee. The initial fee an adviser could charge a client is likely to be much lower than the levels of initial commission currently paid.

- (iii) Discuss the proposed new fee-based business model from the point of view of the customer. [3]
- (iv) Discuss the possible effects on the intermediaries of the move to a fee-based environment. [5]
- (v) Discuss the possible effects of the proposed change on the persistency experience of the insurer. [4]
- (vi) Suggest possible courses of action that the insurer could take in order to maintain new business levels after the planned changes. [7]
- [Total 29]

- 4** The country of Actuarial is considering the introduction of a new solvency capital requirement regime for its health and care insurance companies. Under the new regime, companies are given the option to calculate their solvency capital requirement by either using:

- Standard formulae that will be set by the regulator.

OR

- An “internal model” that will be individually designed and developed by companies that opt for this option. The model must be individually approved by the regulator. Although most companies have been using some form of model under the current solvency capital requirement regime, the regulator has indicated that any existing models are NOT likely to be good enough to be used as internal models.

- (i) Discuss the advantages and disadvantages for companies that opt for the “internal model” approach. [10]

- (ii) Suggest the key requirements that the regulator might impose on a company that decides to design and develop its own “internal model”. [11]

[Total 21]

END OF PAPER