Institute and Faculty of Actuaries

SA1 – Health and Care Advanced

Syllabus

for the 2023 exams

June 2022

SA1 – Health and Care Advanced

Aim

The aim of the Health and Care Advanced subject is to instil in successful candidates the ability to apply knowledge of the health and care environment (in the UK and other jurisdictions) and the principles of actuarial practice to the provision of health and care benefits in complex situations.

Competences

On successful completion of this subject, a candidate will be able to:

1 understand the more complex aspects of actuarial practice within health and care insurance companies.

2 apply the principles of actuarial practice to the management of health and care insurance under complex scenarios.

3 compare the approaches by which the principles are applied in practice across different jurisdictions.

4 recommend coherent solutions and courses of action in relation to the overall management of health insurance companies.

Links to other subjects

SP1 – Health and Care Principles

P1 – Health and Care UK Practice Module

SP2 – Life Insurance Principles

SA2 – Life Insurance Advanced

Syllabus topics

1 Health insurance products and general business environment (30%)

2 Regulatory, legislative and taxation environment (10%)

3 Rating, pricing and underwriting (20%)

4 Valuation, Asset-Liability Management (ALM) and reinsurance (20%)

5 Monitoring and strategy (20%)

These weightings are indicative of the approximate balance of the assessment of this subject between the main syllabus topics, averaged over a number of examination sessions.

The weightings also have a correspondence with the amount of learning material underlying each syllabus topic. However, this will also reflect aspects such as:

- the relative complexity of each topic and hence the amount of explanation and support required for it.
- the need to provide thorough foundation understanding on which to build the other objectives.
- the extent of prior knowledge that is expected.
- the degree to which each topic area is more knowledge- or application-based.

Skill levels

The use of a specific command verb within a syllabus objective does not indicate that this is the only form of question that can be asked on the topic covered by that objective. The Examiners may ask a question on any syllabus topic using any of the agreed command verbs, as are defined in the document 'Command verbs used in the Associate and Fellowship written examinations'.

Questions may be set at any skill level: Knowledge (demonstration of a detailed knowledge and understanding of the topic), Application (demonstration of an ability to apply the principles underlying the topic within a given context) and Higher Order (demonstration of an

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ability to perform deeper analysis and assessment of situations, including forming judgements, taking into account different points of view, comparing and contrasting situations, suggesting possible solutions and actions and making recommendations).

In the SA subjects, the approximate split of assessment across these three skill types is 20% Knowledge, 50% Application and 30% Higher Order skills.

Detailed syllabus objectives

0 Introduction

0.1 Define the principal terms used in health and care in various jurisdictions.

1 Health insurance products and general business environment (30%)

1.1 Describe the major health and care insurance products that are offered, beyond the general descriptions provided in subject SP1.

1.1.1 Describe the benefits and other main features of the following products:

- Critical illness insurance
- Income protection insurance
- Long-term care insurance
- Health cash plans
- Major medical expenses
- Private medical insurance
- Group and individual covers.

1.1.2 Analyse the health and care insurance products outlined in 1.1.1, in terms of:

- customer needs.
- interaction with State provision.
- bundling and unbundling.
- impact of unit-linked wrappers.

1.2 Assess the effect of the general business environment on the management of health and care insurers, in terms of:

- products and distribution, including the roles of the State and employers.
- underwriting approaches, including genetic testing.
- use of counterparties.
- external influences – demographic, medical, economic, political and social, pandemics, climate change.
- key medical conditions, treatments and other current health issues.

1.3 Suggest actions that a health and care insurance company could take in order to ensure that it is treating its customers fairly.

1.4 Understand areas of best practice in international health and care provision.

1.5 Understand the considerations underlying the provision of national healthcare systems:

- The importance of healthcare provision
- Different healthcare systems worldwide
- Different approaches to financing healthcare
- Quality adjusted life years (QALYs).

2 Regulatory, legislative and taxation environment (10%)

2.1 Explain the relevance of legislation to health and care insurance business, in relation to:

- consumer protection.
- equality legislation.

2.2 Explain the implications of the taxation of health and care insurance business for:

- policyholders.
- health and care insurance companies.

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2.3 Describe regulatory frameworks for health and care insurance companies, including:

- objectives of regulators.
- financial reporting requirements.
- conduct of business rules.
- supervisory tools, including rulebooks and reporting requirements.
- statutory actuarial roles.

2.4 Demonstrate understanding of the over-arching Solvency II regulatory framework.

2.4.1 Describe the Solvency II framework in terms of:

- background and scope.
- structure.
- Pillar 2 governance requirements.
- Pillar 3 disclosure and reporting requirements.
- group reporting requirements.

2.4.2 Assess the implications of a regulatory framework such as Solvency II for business culture and strategy.

2.5 Compare regulatory, legislative and taxation environments between different jurisdictions.

2.6 Demonstrate how the regulatory, legislative and taxation environments affect the way in which health and care insurance companies carry out their business in practice.

2.7 Outline the requirements of actuarial standards in relation to actuaries practicing in or advising health and care operations.

3 Rating, pricing and underwriting (20%)

3.1 Demonstrate product design and pricing techniques.

3.1.1 Describe the requirements for the design of health and care insurance products to be marketed in a particular jurisdiction, including:

- policy conditions.
- capital requirements and return on capital.
- marketability, competition and distribution.
- management of the risks.
- underwriting.
- reinsurance.
- investment policy.
- the renewal process and options.
- regulatory requirements.

3.1.2 Determine appropriate methods for pricing such products.

4 Valuation, ALM and reinsurance (20%)

4.1 Demonstrate solvency assessment techniques.

4.1.1 Outline the valuation of assets, liabilities and solvency capital requirements under Solvency II.

4.1.2 Compare solvency assessment approaches between different jurisdictions.

4.2 Demonstrate capital management techniques.

4.2.1 Explain the different types of capital assessment.

4.2.2 Describe the different sources of capital.

4.2.3 Discuss the assessment of ongoing solvency, including practical modelling considerations.

4.2.4 Explain the relationship between capital, risk and economic value.

4.2.5 Propose methods of improving available capital.

4.2.6 Describe the principles of asset-liability management and the use of derivatives.

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4.3 Evaluate the uses and benefits of reinsurance support in health and care insurance:

- Control of risks
- Financing
- Technical assistance
- Reinsurance impact
- Badging.

4.4 Analyse the asset-liability matching requirements of a health and care insurer and develop appropriate strategies.

5 Monitoring and strategy (20%)

5.1 Analyse the experience and surplus/profit of a health and care insurer arising over a period.

5.2 Propose possible actions that should be taken following an analysis of experience or surplus/profit, including capital management and modelling considerations.

5.3 Understand the principles and practices that are relevant to the assessment of specific business strategies:

- Assessment of the market for a new company launch
- Assessment of overseas markets
- Assessment of a company or portfolio for takeover.

5.4 Recommend coherent solutions and courses of action in relation to the overall financial management of health and care insurance companies.

5.4.1 Analyse complex problems in terms of actuarial, economic and financial factors to a level where appropriate analytical techniques may be used.

5.4.2 Assess the implications and relevance of such factors, integrating the results into a coherent whole.

5.4.3 Evaluate the results critically in a wider context, drawing appropriate conclusions.

5.4.4 Propose solutions and actions, or a range of possible solutions and actions, based on this evaluation.

6 Solving problems

6.1 Recommend coherent solutions and courses of action in relation to the overall financial management of health and care insurance companies.

6.1.1 Analyse complex problems in terms of actuarial, economic and financial factors to a level where appropriate analytical techniques may be used.

6.1.2 Assess the implications and relevance of such factors, integrating the results into a coherent whole.

6.1.3 Evaluate the results critically in a wider context, drawing appropriate conclusions.

6.1.4 Propose solutions and actions, or a range of possible solutions and actions, based on this evaluation.

Assessment

The assessment of this subject will consist of one examination. The candidate should be able to apply knowledge of the health and care environment and principles of actuarial practice to the provision of health and care. The duration of this examination is three hours and twenty minutes and is timed and online.

Please read the latest version of the IFoA Examinations Handbook and IFoA Examination Regulations on the IFoA website before sitting any IFoA examination.

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