## Group and Health Specialty Exam

**Fall 2017/Spring 2018**

### Important Exam Information:

<table>
<thead>
<tr>
<th>Category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam Registration</td>
<td>Candidates may register online or with an application.</td>
</tr>
<tr>
<td>Order Study Notes</td>
<td>Study notes are part of the required syllabus and are not available electronically but may be purchased through the online store.</td>
</tr>
<tr>
<td>Introductory Study Note</td>
<td>The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.</td>
</tr>
<tr>
<td>Case Study</td>
<td>A case study will not be used for this exam.</td>
</tr>
<tr>
<td>Past Exams</td>
<td>Past Exams from 2000-present are available on SOA website.</td>
</tr>
<tr>
<td>Updates</td>
<td>Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.</td>
</tr>
</tbody>
</table>
### Exam

#### Learning Objectives

1. Understand pricing, risk management, and reserving for individual long duration health contracts such as Disability Income, Long Term Care, Critical Illness, and Medicare Supplement

#### Learning Outcomes

The candidate will be able to:

- a) Identify differences between short-duration contracts and long-duration contracts, from the standpoints of pricing and reserving
- b) Understand and utilize experience studies in setting assumptions for long-duration contracts
- c) Understand reserve calculations / adequacy for long duration-contracts
- d) Apply applicable Actuarial Standards of Practice

### Syllabus Resources

  - Ch. 8 Forecasting and Modeling
  - Ch. 11 Managing the Business, Sections 11.4-11.6
- GHS-101-14: Pricing Medicare Supplement Benefits, Sections IV & V
- GHS-102-14: Pricing Critical Illness Insurance in Canada
- GHS-103-14: Product Design of Critical Illness Insurance in Canada
- GHS-114-14: Chapters 16, 18 and 19 of *Disability Income Insurance: the Unique Risk*, Fifth Edition, Soule
- *Claim Reserve Model–How Actuaries Rely Upon the Claim Data They Receive*, Long Term Care News, September 2008
- *Combo Long-term Care Products: A Solution to Address Market Needs*, The Actuary, October / November 2013
- *Quantification of the Natural Hedge Characteristics of Combination Life or Annuity Products Linked to Long-Term Care Insurance*, Milliman, March 2012 (pages 9-26)
- ASOP 7, *Analysis of Life, Health or Property/Casualty Insurer Cash Flows* (excluding appendix)
- ASOP 22, *Statement of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health Insurers* (excluding appendix)
- ASOP 18, *Long-Term Care Insurance* (excluding appendix)
- ASOP 23, *Data Quality (excl appendix)*
- ASOP 41, *Actuarial Communications (excl appendix)*
- Report on the Proposed 2016 Cancer Claim Cost Valuation Tables
### Learning Objectives

2. Evaluate the risk associated with health insurance and plan sponsorship and recommend strategies for mitigating the risk

### Learning Outcomes

The candidate will be able to:

- **a)** Evaluate an enterprise risk management (ERM) system, including
  - Describing the components on an ERM program
  - Discussing ERM risks and risks specific to the health insurance industry
  - Describing and recommending methods used to analyze, evaluate and mitigate the risks

- **b)** Complete a capital needs assessment
  - Understand capital needs for a given insurer
  - Determine actions needed to address issues identified by assessment
  - Describe components of an Economic Capital model

- **c)** Integrate reinsurance arrangements within an overall risk management strategy of company plan / sponsor

- **d)** Understand how an Own Risk Solvency Assessment (ORSA) complements and differs from traditional risk assessment

- **e)** Apply applicable Actuarial Standards of Practice

### Syllabus Resources

  - Ch. 39, Risk-Based Capital Formulas
  - Ch. 42, Enterprise Risk Management for Group Health Insurers

  - Chapter 1, An introduction to enterprise risk management
  - Chapter 7, Definitions of risk
  - Chapter 8, Risk identification
  - Chapter 18, Economic capital

- **GHS-115-15**: Health Enterprise Risk Management Study Note-Introduction


- **A Health Insurance Insolvency Case Study**, Health Section News, No 38, 2000 , pp.1 & 20-25


- **Understanding ORSA Before Implementing It**, Risk Management August 2012

- **Considerations for Surplus Determination under ACA**, HealthWatch, May 2014
### Learning Objectives

3. Understand and prepare an actuarial appraisal

### Learning Outcomes

The candidate will be able to:

- Differentiate the components of an actuarial appraisal versus an embedded value
- Describe an approach for preparing an actuarial appraisal
- Describe risks associated with interpreting an actuarial appraisal and an embedded value
- Apply applicable Actuarial Standards of Practice

### Syllabus Resources

- GHS-109-14: The Actuary and Health Insurance Mergers and Acquisitions
- GHS-110-14: Chapter 4 of *Mergers and Acquisitions*, Toole and Herget (sections 4.1-4.8 only)
- GHS-111-14: Components of Insurance Firm Value and the Present Value of Liabilities
- GHS-112-14: Simple Embedded Value Example
- GHS-113-14: Embedded Value of Canadian Group Insurance
- [SOA Embedded Value Calculation for a Life Insurance Company](index.html)
- [ASOP 19, Appraisals of Casualty, Health and Life Insurance Businesses](index.html) (excluding appendices)
### Exam

#### Learning Objectives

4. The candidate will understand and apply risk adjustment in the context of predictive modeling

#### Learning Outcomes

The candidate will be able to:

- a) Describe and compare risk adjustments based on commonly used clinical data and grouping methods
- b) Apply risk adjustment to underwriting, pricing, claims and care management situations
- c) Describe typical predictive modeling techniques
- d) Evaluate the appropriateness of each technique
- e) Apply applicable Actuarial Standards of Practice

#### Syllabus Resources

- *Healthcare Risk Adjustment and Predictive Modeling*, Duncan
  - Ch 2, Models for Predicting Health Costs
  - Ch 4, Clinical Identification Algorithms
  - Ch 5, Grouper Models
  - Ch 6, Development and Construction of DRGs, DCGs, and ETGs
  - Ch 7, Introduction to Modeling (excluding appendix)
  - Ch 13, Medicaid Risk Adjustment
  - Ch 14, Risk Adjustment in Medicare

- GHS-119-17: The HHS-HCC Risk Adjustment Model for Individual and Small Group Markets under the Affordable Care Act (pp E1-E26 excluding Ex 1,2,5,6,8,9 & text describing those exhibits)
- GHS-120-17: HHS-Operated Risk Adjustment Methodology Meeting Discussion Paper – Ch 4 Risk Adjustment Model Improvements (p.35-69 excluding sec 4.2.4)

- ASOP 12, Risk Classification (excluding appendices)