

Group and Health Specialty Exam  
Spring 2015

**Important Exam Information:**

<a href="#">Exam Date and Time</a>	A read-through time will be given prior to the start of the exam—15 minutes in the morning session and 15 minutes in the afternoon session.
<a href="#">Exam Registration</a>	Candidates may register online or with an application.
<a href="#">Order Study Notes</a>	Study notes are part of the required syllabus and are not available electronically but may be purchased through the online store.
<a href="#">Introductory Study Note</a>	The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.
Case Study	A case study will not be used for this examination.
<a href="#">Past Exams</a>	Past Exams from 2000-present are available on SOA website.
<a href="#">Updates</a>	Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.

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Learning Objectives	
1. The candidate will 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 difference between short-duration and long-duration pricing and reserving methods  b) Understand and utilize experience studies in setting assumptions for long-duration contracts  c) Understand reserve calculations / adequacy for long duration-contracts	
Syllabus Resources	
<ul style="list-style-type: none"><li>• <i>Individual Health Insurance</i>, Bluhm<ul style="list-style-type: none"><li>○ Ch. 4 Managing Antiselection</li><li>○ Ch. 8 Forecasting and Modeling</li><li>○ Ch. 11 Managing the Business, Sections 11.4-11.6</li></ul></li><li>• GHS-114-14: Chapters 16, 18 and 19 of <i>Disability Income Insurance: the Unique Risk</i>, Fifth Edition, Soule</li><li>• GHS-100-14: Pricing Long Term Care, pp.9-22</li><li>• GHS-101-14: Pricing Medicare Supplement Benefits, Sections IV &amp; V</li><li>• GHS-102-14: Pricing Critical Illness Insurance in Canada</li><li>• GHS-103-14: Product Design of Critical Illness Insurance in Canada</li><li>• GHS-104-14: <i>Life Insurance Products and Finance</i>, Atkinson and Dallas, Ch. 16, Section 16.2 only</li><li>• <a href="#">Claim Reserve Model—How Actuaries Rely Upon the Claim Data They Receive</a>, Long Term Care News, September 2008</li><li>• <a href="#">Designing &amp; Pricing LTCI Combination Products</a>, Long Term Care News, December 2004</li></ul>	

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<b>Learning Objectives</b>	
2. The candidate will understand and evaluate the risk associated with health insurance and plan sponsorship and recommend strategies for mitigating the risk	
<b>Learning Outcomes</b>	
<p>The candidate will be able to:</p> <ul style="list-style-type: none"> <li>a) Evaluate an enterprise risk management (ERM) system, including <ul style="list-style-type: none"> <li>• Describing the components on an ERM program</li> <li>• Discussing ERM risks and risks specific to the health insurance industry</li> <li>• Describing and recommending methods used to analyze, evaluate and mitigate the risks</li> </ul> </li> <li>b) Complete a capital needs assessment <ul style="list-style-type: none"> <li>• Calculate capital needs for a given insurer</li> <li>• Determine actions needed to address issues identified by assessment</li> <li>• Describe components of an Economic Capital model</li> </ul> </li> <li>c) Integrate reinsurance arrangements within an overall risk management strategy of company plan / sponsor</li> </ul>	
<b>Syllabus Resources</b>	
<ul style="list-style-type: none"> <li>• <i>Group Insurance</i>, Bluhm, 6<sup>th</sup> Edition, 2012 <ul style="list-style-type: none"> <li>○ Ch. 22, Risk-Based Capital Formulas</li> <li>○ Ch. 47, Enterprise Risk Management for Group Health Insurers</li> </ul> </li> <li>• <i>Financial Enterprise Risk Management</i>, Sweeting, 2011 <ul style="list-style-type: none"> <li>○ Chapter 1, An introduction to enterprise risk management</li> <li>○ Chapter 7, Definitions of risk</li> <li>○ Chapter 8, Risk identification</li> <li>○ Chapter 18, Economic capital</li> </ul> </li> <li>• GHS-105-14: Mapping of Health Company Risks</li> <li>• GHS-106-14: Reinsurance for Group Accident &amp; Health Insurance</li> <li>• GHS-107-14: MCCSR Guideline 2013, Office of the Superintendent of Financial Institutions (OSFI) Sections: 1 (excluding 1.2.6), 2.1, 3.1, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 10.1, 10.2, 10.3, 10.4, 10.6</li> <li>• GHS-108-14: Group MCCSR Calculation Study Note 2010</li> <li>• <a href="#">A Health Insurance Insolvency Case Study</a>, Health Section News, No 38, 2000 , pp.1 &amp; 20-25</li> <li>• <a href="#">Taking a Closer Look at Enterprise Risk Management</a>, Clark, Kara, Health Section News. August. 2005</li> <li>• <a href="#">Enterprise Risk Management</a>, Clark, Kara, HealthWatch. January 2006</li> <li>• <a href="#">ASOP 46: Risk Evaluation in Enterprise Risk Management</a>, ASB Final, through p. 14</li> </ul>	

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3. The candidate will understand an actuarial appraisal	
Learning Outcomes	
The candidate will be able to: a) Differentiate the components of an actuarial appraisal versus an embedded value c) Describe an approach for preparing and actuarial appraisal d) Describe risks associated with interpreting an actuarial appraisal and an embedded value	
Syllabus Resources	
<ul style="list-style-type: none"><li>• GHS-109-14: The Actuary and Health Insurance Mergers and Acquisitions</li><li>• GHS-110-14: Chapter 4 of <i>Mergers and Acquisitions</i>, Toole and Herget</li><li>• GHS-111-14: Components of Insurance Firm Value and the Present Value of Liabilities</li><li>• GHS-112-14: Simple Embedded Value Example</li><li>• GHS-113-14: Embedded Value of Canadian Group Insurance</li><li>• <a href="#">SOA Embedded Value Calculation for a Life Insurance Company</a></li></ul>	

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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: <ul style="list-style-type: none"><li>a) Develop and evaluate risk adjustments based on commonly used clinical data and grouping methods</li><li>b) Apply risk adjustment to underwriting, pricing, claims and care management situations</li><li>c) Describe typical predictive modeling techniques</li><li>d) Evaluate the appropriateness of each technique</li></ul>	
Syllabus Resources	
<ul style="list-style-type: none"><li>• <i>Healthcare Risk Adjustment and Predictive Modeling</i>, Duncan<ul style="list-style-type: none"><li>○ Ch 1, Introduction to Health Risk</li><li>○ Ch 2, Models for Predicting Health Costs</li><li>○ Ch 3, Data: The Raw Material of Modeling</li><li>○ Ch 4, Clinical Identification Algorithms</li><li>○ Ch 5, Grouper Models</li><li>○ Ch 6, Development and Construction of DRGs, DCGs, and ETGs</li><li>○ Ch 7, Introduction to Modeling</li><li>○ Ch 14, Risk Adjustment in Medicare</li><li>○ Ch 15, Risk Adjustment and Health Care Reform: The Example of Massachusetts</li><li>○ Ch 16, Developing and Using Predictive Models for Care Management Programs</li></ul></li></ul>	