Important Exam Information:

Exam Registration	Candidates may register online or with an application.
Order Study Notes	Study notes are part of the required syllabus and are not available electronically but may be purchased through the online store.
Introductory Study Note	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.
Past Exams	Past Exams from 2000-present are available on SOA website.
<u>Updates</u>	Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or

notices.

Exam		Group/Health Advanced		
Learning Objectives				
1.	1. Evaluate the effectiveness of traditional and leading edge provider reimbursement methods from both a cost and quality view point			
Learning Outcomes				
The candidate will be able to:				
a)	c) Calculate provider payments under standard and leading edge reimbursement methods			
b)	Evaluate standard contracting methods from a cost-effective perspective			
c)	Describe the credentialing and contracting process for providers			
d)	Understand accountable care organizations and medical patient home models and their impact on quality, utilization and costs			
e)	Evaluate the effectiveness of pharmacy benefit managers on controlling costs and providing quality care			
f)	Describe quality measures and their impact on key stakeholders			
Syllabus Resources				
•	• Essentials of Managed Health Care, Kongstvedt, 6 th Edition			
	o Ch. 4 The Provider Network			

- The Provider Network
- Ch. 5 Provider Payment
- o Ch. 9 Physician Practice Behavior and Managed Health Care
- o Ch. 10 Data Analysis and Provider Profiling in Health Plans
- Ch. 11 Prescription Drug Benefits in Managed Care
- Ch. 12 Introduction to Managed Behavioral Health Care Organizations
- GHA-100-13: The Handbook of Employee Benefits, 7th Edition, 2011, Ch. 9 Health Care Quality: Are We Getting Our Money's Worth?
- GHA-101-13: A First Look at ACOs Risky Business: Quality Is Not Enough
- GHA-102-13: Evaluating Bundled Payment Contracting
- GHA-110-15: Commonwealth Fund Paper The Final Rule for the Medicare Shared Savings Program
- Measurement of Quality and Efficiency: Resources for Health Care Professionals

Exam Group/Health Advanced

Learning Objectives

2. Evaluate and apply techniques for claims utilization and disease management

Learning Outcomes

The candidate will be able to:

- a) Describe, compare and evaluate care management programs and interventions
- b) Estimate savings, utilization rate changes and return on investment as it applies to program evaluation
- c) Describe operational issues in the development of a study including acceptable methods for dealing with the issues
- d) Perform a literature review about program evaluation
- e) Describe value chain analysis as it applies to the planning and management of disease management and other intervention analysis
- f) Apply the actuarially adjusted historical control methodology
- g) Calculate chronic and non-chronic trends in a manner that reflects patient risk
- h) Apply methodologies to reduce random fluctuation and maintain validity for disease management effectiveness studies

Syllabus Resources

- Managing and Evaluating Healthcare Intervention Programs, Duncan, Second Edition
 - o Ch. 1 Introduction
 - o Ch. 2 Clinical Background (background only)
 - o Ch. 3 Care Management Programs and Interventions
 - Ch. 4 Actuarial Issues in Care Management Evaluations
 - Ch. 5 Estimating Savings, Utilization Rate Changes and Return on Investment: A Selective Review of the Literature on Program Evaluation
 - o Ch. 6 The Use of the Value Chain in Care Management Program Planning
 - o Ch. 7 Clinical Quality and Its Measurement, Exclude Appendices
 - Ch. 8 Understanding the Economics of Care Management Programs
 - o Ch. 9 Applying the Economic Model: the Example of Opportunity Analysis
 - o Ch. 10 Measuring Care Management Savings Outcomes
 - o Ch. 11 The Use of Propensity Scoring in Program Evaluation
 - o Ch. 12 An Actuarial Method for Evaluating Care Management Outcomes, Exclude Appendix 12.2 and 12.3
 - o Ch. 13 Understanding Patient Risk and Its Impact on Chronic and Non-Chronic Member Trends
 - o Ch. 14 Random Fluctuations and Validity in Measuring Disease Management Effectiveness for Small Populations, Exclude Appendix
 - o Ch. 15 A Comparative Analysis of Chronic and Non-Chronic Insured Commercial Membership Cost Trends
 - Ch. 16 Testing Actuarial Methods for Evaluating Disease Management Savings Outcomes, Excluding Appendix 16.1

Exam Group/Health Advanced

Learning Objectives

3. Calculate claim and non-claim reserves and evaluate the necessity of each reserve and appropriateness of various reserving techniques

Learning Outcomes

The candidate will be able to:

- a) Describe the types of claim reserves (e.g., due and unpaid, ICOS, IBNR, LAE, PVANYD)
- b) Explain the limitations and applications of the traditional valuation methods:
- c) Calculate appropriate claim reserves given data
- d) Identify adjustments to IBNR (margins, trend, seasonality, claims processing changes, etc.)
- e) Evaluate data resources and appropriateness for calculating reserves
- f) Describe, calculate and evaluate non-claim reserves and explain when each is required
- g) Evaluate adequacy of the reserve
- h) Apply applicable standards of practice related to reserving

Syllabus Resources

- Group Insurance, Bluhm, 6th Edition
 - Ch. 23 Actuarial Certification of Reserves
 - o Ch. 42 Short-Term Reserves
 - Ch. 43 Claim Reserves for LongTerm Benefits
- GHA-103-13: Health Reserves (Lloyd)
- GHA-109-13: Chapter 6 of *Individual Health Insurance,* Bluhm
- GHA-111-15: US GAAP for Life Insurers, Herget,2nd Edition
 - o Ch. 10 Individual Health Insurance
 - o Ch. 12 Group Insurance, Large Case Pension Liabilities and Related Liabilities (pages 381 389)
 - o Ch. 14 Shadow Adjustments (pages 441-444)
- The New IBNR Study, HealthWatch, February 2010
- AAA Premium Deficiency Reserves Discussion Reports
- Health Section News, 10/2004, Read, Write, Think
- ASOP 5, Incurred Health and Disability Claims
- ASOP 28, Statements of Actuarial Opinion Regarding Health Insurance Liabilities and Assets
- ASOP 42 Determining Health and Disability Liabilities Other Than Liabilities for Incurred Claims
- Financial Reporting Implications Under the Affordable Care Act, Section IV

Exam Group/Health Advanced

Learning Objectives

4. Apply principles of pricing, benefit design and funding to an underwriting situation

Learning Outcomes

The candidate will be able to:

- a) Understand the risks and opportunities associated with a given coverage, eligibility requirement or funding mechanism
- b) Evaluate the criteria for classifying risks
- c) Understand, evaluate and apply various risk adjustment mechanisms
- d) Recommends strategies for minimizing or properly pricing for risks
- e) Describe basic approaches to assigning claim credibility and pooling claims
- f) Apply the credibility and pooling to a given underwriting situation
- g) Apply applicable Actuarial Standards of Practice

Syllabus Resources

- Group Insurance, Bluhm, 6th Edition
 - Ch. 26 Underwriting Large Groups
 - o Ch. 27 Underwriting Small Groups
 - o Ch. 28 Managing Selection in a Multiple-Choice Environment
 - o Ch. 30 Health Risk Adjustment
 - Ch. 37 Experience Rating and Funding Methods
- GHA-104-15: Actuarial Aspects of Employer Stop Loss
- GHA-105-13: Group Disability Insurance (section 6 only)
- GHA-106-13: Group Life Insurance Sections 5 & 7
- GHA-108-13: Medical Underwriting: Approaches and Regulatory Restrictions (Shreve-Milliman Research Report)
- Modeling Anti-Selective Lapse and Optimal Pricing in Individual and Small Group Health Insurance, HealthWatch, February 2010
- ASOP 12, Risk Classification
- ASOP 26, Compliance with Statutory and Regulatory Requirements for the Actuarial Certification of Small Employer Health Benefit Plans
- Financial Reporting Implications Under the Affordable Care Act, Section I