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. The candidate will understand how to 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) 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

- Essentials of Managed Health Care, Kongstvedt, 6th Edition
 - o Ch. 4 The Provider Network
 - o 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
 - o Ch. 11 Prescription Drug Benefits in Managed Care
 - o 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
- Measurement of Quality and Efficiency: Resources for Health Care Professionals
- <u>Commonwealth Fund Paper The Final Rule for the Medicare Shared Savings Program</u>

Exam Group/Health Advanced

Learning Objectives

2. The candidate will understand how to describe and evaluate the functions underlying a well-run health plan

Learning Outcomes

The candidate will be able to:

- a) Compare the relationship between different marketing channels and how each market impacts the underlying needs of the consumers.
- b) Describe the product development process including risks and opportunities to be considered during the process
- c) Describe the claims adjudication process
 - i. Identify data required to adjudicate claims
 - ii. Understand techniques for identifying and preventing claims processing errors
 - iii. Understand techniques for identifying and preventing fraud
- d) Understand the basic processes of member services including
 - i. Understand the basic process of call centers
 - ii. Understand the basic staffing and management issues in member services
 - iii. Understand the basics of how a plan addresses member concerns and grievances
 - iv. Understand proactive approaches a plan may take to measuring and maintaining member satisfaction
 - v. Understand the legal and regulatory aspects of member services
- e) Understand the basic activities of sales and marketing within a managed care organization
 - i. Understand how marketing differs from sales
 - ii. Understand compensation of sales and marketing personnel
 - iii. Understand the different segments of the health care market
 - iv. Understand how sales and marketing differ by market
 - v. Understand how metrics are used in the sales and marketing process

- Essentials of Managed Health Care, Kongstvedt, 6th Edition
 - o Ch. 16, Marketing and Sales
 - Ch. 17, Enrollment and Billing
 - o Ch. 18, Claims and Benefit Administration
 - o Ch. 19, Health Care Fraud and Abuse
 - o Ch. 20, Member Services
- Group Insurance, Bluhm, 6th Edition
 - o Ch. 46 Product Development

Exam Group/Health Advanced **Learning Objectives** 3. The candidate will understand how to evaluate 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 Estimate savings, utilization rate changes and return on investment as it applies to program evaluation b) 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

- Managing and Evaluating Healthcare Intervention Programs, Duncan
 - o Ch. 1 Introduction
 - o Ch. 2 Care Management Programs and Interventions
 - o Ch. 3 Actuarial Issues in Care Management Evaluations
 - o Ch. 4 Estimating Savings, Utilization Rate Changes and Return on Investment A Selective Review of the Literature on Program Evaluation, Exclude Appendix 4.2
 - o Ch. 5 The Use of the Value Chain in Disease Management Program Planning
 - o Ch. 6 Understanding the Economics of Disease Management Programs
 - o Ch. 7 Measuring Disease Management Savings Outcomes
 - o Ch. 8 An Actuarial Method for Evaluating Disease Management Outcomes
 - o Ch. 9 Understanding Patient Risk and Its Impact on Chronic and Non-Chronic Member Trends
 - o Ch. 10 Random Fluctuations and Validity in Measuring Disease Management Effectiveness for Small Populations
 - $\circ \qquad \hbox{Ch. 11 Comparative Analysis of Chronic and Non-Chronic Insured Commercial Member Cost Trends}\\$
 - o Ch. 12 Testing Actuarial Methods for Evaluating Disease Management Outcomes

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Lear	ning Objectives	s			
4.	The candidate will understand how to formulate, calculate and evaluate carrier reserving techniques				
Lear	ning Outcomes	S			
The	candidate will b	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 various valuation methods:				
	i.	Lag methods			
	ii.	Tabular methods			
	iii.	Case reserves			
	iv.	Projection methods			
	٧.	Loss ratio methods			
c)	Calculate app	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 different types of reserves and explain when each is required				
	i.	Deficiency reserves			
	ii.	Active life reserves			
	iii.	Premium reserves			
	iv.	Deferred acquisition costs			
	v.	Claim administration expense reserves			
	vi.	Calculate the reserves given data			
g)	g) Demonstrate adequacy of the reserve				
	i.	Gross premium valuation			
	ii.	Asset adequacy analysis			
	iii.	Recast analysis			
Cull-	ahus Dasaur				
Jylia	abus Resources				

- Group Insurance, Bluhm, 6th Edition
 - o Ch. 42, Short-Term Reserves
 - o Ch. 43 Claim Reserves for Long Term Benefits
- GHA-109-13 Individual Health Insurance, Bluhm
 - o Ch. 6 Reserves and Liabilities
- GHA-103-13: Health Reserves (Lloyd)
- GHA-30-13: 2009 Health Meeting,
 - o <u>Session 17 Claims Payment Issues</u>
 - o <u>Session 78 The Art of Reserving</u>
- <u>The New IBNR Study</u>, HealthWatch, February 2010
- AAA Premium Deficiency Reserves Discussion Reports

Exam Group/Health Advanced **Learning Objectives** The candidate will understand and prepare a Statement of Actuarial Opinion (SAO) for selected Health Matters **Learning Outcomes** The candidate will be able to: Describe the U.S. Qualifications Standards and Statements of Actuarial Opinion (SAOs) as outlined in the Standard a) Discuss specific issues with respect to this class of SAOs b) Certification of health reserves Develop documentation for an SAO c) d) Discuss approaches to deal with obstacles to producing an unqualified SAO e) Describe common situations where insurance regulations or Medicare laws call for a signed SAO by a qualified actuary f) Describe the continuing education credits for signing SAOs Syllabus Resources Group Insurance, Bluhm, 6th Edition Ch. 23, Actuarial Certification of Reserves

- Ch. 24, Small Group Rate Filings and Rate Certifications
- Health Section News, 10/2004, Read, Write, Think
- AAA Qualification Standards, January 2008
- Introduction to ASOPs
- ASOP 5, Incurred Health and Disability Claims
- ASOP 7, Analysis of Life, Health or Property/Casualty Insurer Cash Flows
- ASOP 8, Regulatory Filings for Health Plan Entities
- ASOP 12, Risk Classification
- ASOP 17, Expert Testimony by Actuaries
- ASOP 19, Appraisals of Casualty, Health and Life Insurance Businesses
- ASOP 21, Responding to or Assisting Auditors or Examiners in Connection with Financial Statements for All Practice Areas
- ASOP 22, Statement of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health Insurers
- ASOP 23, Data Quality
- ASOP 25, Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages
- ASOP 26, Compliance with Statutory and Regulatory Requirements for the Actuarial Certification of Small Employer Health Benefit Plans
- ASOP 28, Statements of Actuarial Opinion Regarding Health Insurance Liabilities and Assets
- **ASOP 41 Actuarial Communications**
- ASOP 42 Determining Health and Disability Liabilities Other Than Liabilities for Incurred Claims
- ASOP 45 The Use of Health Status Based Risk Adjustment Methodologies

Exam	Group/Health Advanced			
Learning Objectives				
6. The candidate will understand how to 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) Recommends strategies for minimizing or properly pricing for risks
- d) Describe basic approaches to credibility theory
- e) Apply the credibility theory to a given underwriting situation

- Group Insurance, Bluhm, 6th Edition
 - o Ch. 26 Underwriting Large Groups
 - o Ch. 27 Underwriting Small Groups
 - o Ch. 28 Managing Selection in a Multiple-Choice Environment
 - o Ch. 37 Experience Rating and Funding Methods
- GHA-104-13: 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-107-13: Pricing Medicare Supplement Benefits, Section VI
- 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