Group and Health Advanced Exam
Spring/Fall 2017

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 copy of the case study will be provided with the examinations. Candidates will not be allowed to bring their copy of the case study into the examination room.

**Past Exams**  Past Exams from 2000 - present are available on the SOA website.

**Updates**  Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.
# Learning Objectives

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) 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 various methods of controlling costs and providing quality care-within pharmacy benefits
- f) Describe quality measures and their impact on provider reimbursement

## Syllabus Resources

  - Ch. 4 The Provider Network
  - Ch. 9 Physician Practice Behavior and Managed Health Care
  - 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-102-13: Evaluating Bundled Payment Contracting**
- **GHA-110-15: Commonwealth Fund Paper – The Final Rule for the Medicare Shared Savings Program**
- **Provider Payment Arrangements, Provider Risk, and Their Relationship With Cost of Healthcare** p.1-50 (excl appendices)
## Learning Objectives

2. Evaluate and apply techniques for claim utilization management, care management, and population health management

## Learning Outcomes

The candidate will be able to:

a) Describe, compare and evaluate care management and population health programs and interventions
b) Estimate savings, utilization rate changes and return on investment as it applies to program evaluation
c) Describe the considerations in the design, implementation and evaluation of a care management program
d) Describe value chain analysis as it applies to the planning and management of disease management and other intervention analysis
e) Apply the actuarially adjusted historical control methodology
f) Calculate chronic and non-chronic trends in a manner that reflects patient risk
g) Apply methodologies to reduce random fluctuation and maintain validity for disease management effectiveness studies

## Syllabus Resources

  - Ch. 1 Introduction (background only)
  - Ch. 2 Clinical Background (background only)
  - Ch. 3 Care Management Programs and Interventions
  - Ch. 4 Actuarial Issues in Care Management Evaluations
  - Ch. 6 The Use of the Value Chain in Care Management Program Planning
  - Ch. 8 Understanding the Economics of Care Management Programs
  - Ch. 9 Applying the Economic Model: the Example of Opportunity Analysis
  - Ch. 10 Measuring Care Management Savings Outcomes
  - Ch. 12 An Actuarial Method for Evaluating Care Management Outcomes, Exclude Appendix 12.2 and 12.3
  - Ch. 13 Understanding Patient Risk and Its Impact on Chronic and Non-Chronic Member Trends
  - Ch. 14 Random Fluctuations and Validity in Measuring Disease Management Effectiveness for Small Populations, Exclude Appendix
  - Ch. 16 Testing Actuarial Methods for Evaluating Disease Management Savings Outcomes, Excluding Appendix 16.1
- GHA-112-16: Commonwealth Fund – the Road to Accountable Care
- GHA-113-16: Population Health Alliance and HERO– Program Management and Evaluation Guide – Chapters 1 and 2
### Group and Health Advanced Exam
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<td>3. Understand and apply valuation principles for insurance contracts</td>
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#### 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 biases of the traditional valuation methods:
c) Calculate appropriate claim reserves given data
d) Reflect environmental factors in reserve calculations (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) Apply applicable standards of practice related to reserving

#### Syllabus Resources

  - Ch. 37 Claim Reserves for Short-Term Benefits
  - Ch. 38 Claim Reserves for Long-Term Benefits
- GHA-103-16: Health Reserves (Lloyd)
- GHA-114-16: Canadian Standards of Practice, sections 2130 and 2300 (excluding 2320.35 to 2320.39, 2340, 2350.19 to 2350.30, 2350.40 to 2350.50 and 2360).
  - Ch. 6 Reserves and Liabilities
- CIA Educational Note - **Valuation of Group Life and Health Policy Liabilities**, Sections 6-14
- 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
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## Learning Objectives

4. Apply principles of pricing, risk assessment 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) Understand, evaluate and apply various risk adjustment mechanisms

c) Recommend strategies for minimizing or properly pricing for risks

d) Describe and apply approaches to claim credibility and pooling

e) Apply applicable Actuarial Standards of Practice

## Syllabus Resources

  - Ch. 21 Estimating Medical Claim Costs pp 356-361
  - Ch. 27 Experience Rating and Funding Methods
  - Ch. 30 Group Insurance Underwriting
  - Ch. 31 Managing Selection in a Multiple-Choice Environment
  - Ch. 33 Health Risk Adjustment
- **GHA-104-15**: Actuarial Aspects of Employer Stop Loss
  - Ch. 4 Managing Antiselection pp.83-123 only
- **GHA-118-17**: Issues to Consider in Self-Funding Long-Term Disability Insurance
- **ASOP 45**: The Use of Health Status Based Risk Adjustment Methodologies
- **Issues In Applying Credibility to Group Long term Disability Insurance**, pp 5-15